

THE GOVERNMENT OF THE PHILIPPINE ISLANDS
DEPARTMENT OF THE INTERIOR
BUREAU OF HEALTH

REPORT OF THE BUREAU OF HEALTH FOR THE PHILIPPINE ISLANDS

FOR THE FISCAL YEAR FROM JANUARY 1
TO DECEMBER 31, 1914

VICTOR G. HEISER, M. D.
DIRECTOR OF HEALTH
Surgeon, United States Public Health Service

MANILA
BUREAU OF PRINTING
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ANNUAL REPORT OF THE BUREAU OF HEALTH.

DEPARTMENT OF THE INTERIOR, BUREAU OF HEALTH FOR THE PHILIPPINE ISLANDS,

Manila, January 25, 1915.

SIR: I have the honor to submit herewith the following report, with tables of vital and other statistics, of the health and medical work which the Bureau of Health has conducted throughout the Philippine Islands, for the year ended December 31, 1914.

THE YEAR IN BRIEF.

During the year the best efforts of the Bureau were concentrated upon holding the ground that had already been gained. This was especially difficult in the provinces, owing to the scarcity of funds and to the lack of adequate legislation. The improvements that might be hoped for in this connection were well exemplified in the Province of Cebu, where there was a reasonable amount of funds available and effective legislation that happened to meet the conditions. The district health officer reports that artesian wells and reservoirs have largely replaced the insanitary wells; vaccination of all the inhabitants is nearing completion; a threatened invasion of cholera was successfully repelled; the campaign against soil pollution made good progress; persons with curable maladies were transferred from all parts of the province to the Southern Islands Hospital, successfully treated, and returned to their homes; all known lepers have been isolated; trachoma examinations have been made in the schools; and in general modern health measures have been very successfully carried out, with the result that the province now enjoys a death rate well below 16 per 1,000. This again makes concrete proof that if facilities well within the ability of the community to grant are placed in the hands of competent health officers, most profitable results can be confidently counted upon.

Cholera became threatening in Manila during July and then appeared in the provinces as far north on the Island of Luzon as Ilocos Sur and to the south as far as Tayabas, and in addition gained a foothold in Capiz. In combating the outbreak, principal reliance was placed upon isolating the sick and the cholera carriers and disposing of human excreta of whole populations in a safe manner. At this writing the disease has disappeared almost completely.

There have been no cases of either rat or human plague in the Islands since September, 1914.

The Secretary of the Interior gave strong support for an increased medical service in the Mountain Province and in Palawan, with the result that there has been a considerable increase authorized for more doctors and nurses in those sections.

The construction of new markets has been actively carried out and the recommendation of the Bureau of Health for adequate toilet facilities in connection with markets has been acted upon and is having good effect not only in preventing insanitary conditions in the vicinity of the markets, but also in the instruction of the more ignorant classes in the proper use of latrines.

PERSONNEL.

For the first time in the history of the Bureau of Health, no officers of the Bureau were imported from the United States, all vacancies being filled by residents of the Islands. Doctor Vicente de Jesus was appointed Assistant Director of Health on January 22, 1914. The undersigned was absent a large part of the year on leave of absence in the United States, during which time his duties were performed by Dr. De Jesus, who under the law became Acting Director of Health, with the benefit of the advice of Maj. Edward L. Munson, of the Medical Corps, U. S. Army, to whom are extended thanks and grateful appreciation for the very satisfactory manner in which he carried on the work.

MANILA'S DEATH RATE.

The death rate for the city of Manila during the month of June reached 17.65 per 1,000 per annum, which is the lowest point which has been reached since American occupation. Owing to the appearance of cholera in the city, the result of the second half of the year was an increase in the death rate, so that the average for the year was 24.67 per 1,000 as compared with 24.98 for last year.

CENSUS OF THE CITY OF MANILA.

During the month of January the Bureau of Health, with the assistance of the city police department, took a census of the city of Manila which included the enumeration of the different nationalities, the sexes and ages, and also of the number and kind of houses. The health census made in 1910 showed the population to be 234,409; the last census (1914) showed a population of 266,943, an increase of 32,534. Contrary to general opinion, the number of Americans increased from 4,174 to 5,474, an increase of 1,300. There was also a decided increase in the number of Spaniards, of whom the health census

for 1910 shows 2,364 and the last census 4,406. For convenience, the census for 1910 and that for 1914 are given below. The details with regard to sex, nationality, etc., will be found in the statistical tables in the appendix.

Bureau of Health census, city of Manila.

Nationality.	Population.	
	1910.	1914.
Americans.....	4,174	5,474
Filipinos.....	211,859	286,940
Spaniards.....	2,364	4,406
Other Europeans.....	644	1,506
Chinese.....	14,098	16,667
All others.....	1,275	1,960
Total.....	234,409	266,943

SOIL POLLUTION.

Most encouraging progress has been made in the campaign against soil pollution. There is reasonable hope that if the disposal of human excrement can be properly safeguarded it will result in an annual saving of at least 25,000 lives in the Philippine Islands.

During the year Health Bulletin No. 13, entitled "The Disposal of Human Wastes in the Provinces," was issued and arrangements have been made with the Bureau of Education for teaching its contents in the public schools. In addition, all health officers have been instructed to bring the model ordinance which is included in this bulletin to the attention of the municipal authorities. This has resulted in the enactment of this ordinance in many municipalities and it is estimated that at least 100,000 sanitary pails have been put into use since this campaign was begun. It is estimated that at least 90 per cent of the inhabitants of the Philippines are infested with some form of intestinal parasite. As soon as the precautions against reinfestation become more generally adopted, it is the intention to take steps to rid the inhabitants of the parasites which they harbor, and the prospects of making great improvement in the health of the residents of these Islands is indeed very encouraging.

MANILA'S WATER SUPPLY.

During the dry season which ended in the month of June, it was again demonstrated in a most forcible manner that an additional amount of water for Manila is necessary in order that there may be an adequate supply at all times of the year. The old pumping plant had to be put into operation and this meant that polluted water from the Mariquina River was pumped into the city reservoir.

MANILA'S WATER SUPPLY AND CALCIUM HYPOCHLORITE.

The use of calcium hypochlorite was again begun in the city's water supply during the time that water from the polluted Marikina River was pumped into the city reservoir. Apparently the use of this chemical had the effect of preventing the increase in the death rate which has heretofore invariably taken place when this polluted water was put into use. After considerable experimentation it was found that it had to be used in the proportion of 1 to 1,300,000. This is a stronger solution than it has been found necessary to use in the United States; but on account of the large amount of organic matter which is contained in tropical water supplies generally, and that of Manila in particular, the net strength probably remains the same as in more temperate countries. The use of calcium hypochlorite has been continued and the average daily bacterial count during the months of October, November, and December, 1914, has been, for the new reservoir, 210 colonies per c. c.; San Juan Tap, 55 per c. c.; city tap, Bureau of Science, 37 per c. c.; and colon organisms were rarely found. The use of this chemical in water supplies that are threatened with cholera infection, places a valuable weapon in the hands of the sanitarian and by its use an epidemic water-borne outbreak of cholera in a city like Manila would be impossible.

GARBAGE RECEPTACLES.

After a number of further experiments, the city of Manila finally adopted a type of garbage receptacle so that the provisions of Ordinance No. 208 could be put into effect. The present plan provides that householders may rent garbage receptacles from the city as follows: Type A shall contain at least 16 liters (16.9 quarts) and shall rent for $8\frac{1}{3}$ centavos ($4\frac{1}{6}$ cents) per month; type B shall contain at least 40 liters (42.3 quarts) and shall rent for $16\frac{2}{3}$ centavos ($8\frac{1}{3}$ cents) per month; type C shall contain at least 60 liters (63.4 quarts) and shall rent for 25 centavos ($12\frac{1}{2}$ cents) per month. During the year the use of these receptacles has become quite general, although there are still too many exceptions to the rule. In those portions of the city in which all residents provided themselves with the receptacles, garbage was disposed of without odors and annoyance and anti-rat measures were carried out much more satisfactorily. The experience of the Bureau up to the present time fully confirms the belief that a uniform covered garbage receptacle for each householder is an essential sanitary requirement of a tropical city.

THE ADMINISTRATION OF SANITARY MATTERS IN THE DEPARTMENT OF MINDANAO AND SULU.

With the establishment of civil government in the Moro Province, there began a most active development along medical and sanitary lines. This work had been at first placed in charge of Maj. E. L. Munson, Medical Corps, U. S. Army, who developed a plan of organization and started much of it under the military administration. Later it was continued by Dr. Jacobo Fajardo, who was formerly a district health officer in the service of this Bureau. Up to date 3 hospitals and 47 dispensaries have been started; drinking-water reservoirs are under way in Jolo and Zamboanga; the campaign against soil pollution by bringing into use sanitary pails is making progress; 34,000 vaccinations have been performed; municipal sanitation in Zamboanga and Jolo is excellent; and progress is being made in the other municipalities.

The establishment of dispensaries for the medical relief of suffering has had a most important effect in promoting peace and order in some of the most disturbed sections. Doctors and nurses now go about in perfect safety in many places where a stranger heretofore was in great danger.

At present the health administration of the Moro Province is directly in charge of the chief medical officer of that province, who works under the governor of the Department of Mindanao and Sulu. Act No. 2408 provides that upon the request of the governor of Mindanao and Sulu the work shall be transferred to the Bureau of Health for the Philippine Islands, but it has not been deemed advisable to make the change as yet, owing to the difficulties and delays incident to the distance and lack of frequent communication.

MARKETS AND THEIR EFFECT ON SANITATION.

During the year the Insular Government has continued to make available loans to municipalities for the purpose of constructing modern market buildings of reinforced concrete. These projects have been popular with the municipalities of the Philippines, owing to the fact that the rental from stalls soon enables them to repay the principal and then there is a steady source of municipal revenue afterward. The cause of sanitation is enhanced by providing a cleanly method for selling provisions and by making it practicable for the health officer to inspect them prior to sale.

The Executive Bureau has continued the policy of requiring the installation of toilet facilities in connection with markets.

These serve the needs of the people who use the markets and at the same time tend to educate people who have primitive habits.

GOVERNMENTAL CHARITIES.

In the past practically all of the governmental charities have been administered by the Bureau of Health. The field is so large and there is so much to accomplish that up to the present time there has been very little duplication with efforts of private institutions. In the past few years, however, special bills have been passed by the Legislature granting aid directly to a number of institutions without providing any definite accounting system as to the manner in which the funds were to be used or that duplication of effort should not take place. The organic laws of the Philippines also provide that matters of a charitable nature shall be administered under the direction of the Secretary of Public Instruction. In addition, many new charities were springing up. In view of the foregoing, it seemed desirable to coördinate all of these different functions under one head, in order that there might be no duplication of effort and that the greatest efficiency might be secured. During June the Secretary of Public Instruction called together officials from the different bureaus and offices of the Government for the purpose of discussing with him a plan by which a public-welfare organization might be created. Legislation is now pending which has for its object better and more efficient administration of charitable and social effort.

MANILA FREE DISPENSARIES.

As in previous years, the Bureau of Health has contributed medicines to St. Luke's Hospital, Mary J. Johnston Hospital, Christian Hospital, San Juan de Dios Hospital, and St. Paul's Hospital. During the past year the Christian Hospital has secured a new location on Calle Gastambide, at which an extensive charity clinic is conducted. The Mary J. Johnston Hospital is furnishing pasteurized milk for over 150 infants, largely from the poorer districts of Tondo. The Bureau of Health also maintains a free dispensary service at each of the five health stations.

MILK.

The fresh milk supply of the city of Manila is still very unsatisfactory. A few dairies have complied with the standards of the commission on milk standards appointed by the New York Milk Committee, but the great bulk of the milk sold in Manila is handled under most insanitary conditions. On account of

the fact that it is practically all collected by persons who own one or two carabaos and who are scattered over an enormous territory outside of Manila, it is impracticable at present to enforce the requirements of a modern dairy. It has been the hope to make the milk at least reasonably safe by proper pasteurization and in order to accomplish this the Legislature made an appropriation to "La Gota de Leche" Society for the Protection of Infants for the construction of a building in which may be installed the milk sterilizing plant which was donated by Mr. Nathan Strauss of New York. The erection of this building has been discouragingly slow, but the prospects now are that it will be available for use during the course of the next few months.

CANNED MILK.

Heretofore the poor quality of most of the fresh milk which is offered for sale in the Philippines has been largely offset by the importation of an excellent quality of natural whole milk which can be bought under contract for large quantities in the Manila market for less than 24 centavos (12 cents) per liter (quart). The competition became so keen, however, that many dealers began to sell skimmed canned milk, which was placed in cans with most attractive labels, and as a large proportion of the public did not appreciate that skimmed milk was not a nourishing food for children, large quantities of it began to be sold. This practice has been effectively stopped by the Legislature placing an internal-revenue tax upon all skimmed milk, in whatever form, from which the cream has been removed entirely or in part, of 20 centavos (10 cents) for each kilogram (2.2 pounds) of gross weight of said milk and containers. This affords another instance where taxation has come to the rescue of sanitation in a most effective manner. The following statistical table, furnished by the Insular Collector of Customs, shows the constantly increasing use of imported canned milk:

Importations of milk.

Year.	Condensed.		Fresh.	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>		<i>Gallons.</i>	
1903	3,070,028	\$247,366		
1904	3,233,062	251,261	8,804	\$2,494
1905	2,018,376	233,667	8,537	3,778
1906	3,776,761	284,496	34,879	11,428
1907	3,646,264	289,789	69,030	27,436
1908	4,147,413	349,307	81,669	36,627
1909	4,752,733	406,607	113,397	47,233
1910	6,371,129	475,882	149,656	49,814
1911	9,507,983	623,641	146,922	66,881
1912	11,411,590	765,548	267,962	110,014
1913	9,927,069	721,601	271,765	111,287
1914	9,803,132	724,062	317,470	132,083

POSTGRADUATE COURSES FOR HEALTH OFFICERS.

During the year medical officers already in the service of the Bureau of Health and others who desire to be appointed to positions with the Bureau took advantage of the privilege of taking a short postgraduate course on health and sanitation, which was given by the medical inspector at the Meisic Station. This has had the effect of stimulating interest in these subjects and of making available much better qualified men than has been the case in the past.

MOSQUITO DESTRUCTION IN MANILA.

During September the Municipal Board requested that the Bureau of Health again take charge of the campaign for mosquito destruction in the city of Manila and offered to pay the expenses connected therewith. This Bureau has again undertaken the work and it is satisfactory to report that Manila is again reasonably free of mosquitoes that annoy man.

ARTESIAN-WELL INFECTION.

Considerable difficulty has been encountered during the past year by the presence of colon bacilli and other pathogenic organisms which were found in artesian wells that were free of these bacteria at the time that the wells were first opened. It seems likely that the infection is due to the habit of "priming" the pumps of wells which have to be pumped. Briefly, investigation has shown that in many instances the water from the nearest carabao wallow or other contaminated source is poured into the pump and thus the infection probably takes place. At least this apparently accounts for some of the difficulties. It has been attempted to relieve this infection by constant pumping with a steam pump with the hope of actually flooding it out. This, however, has seldom been successful. Later, large quantities of potassium permanganate and in many instances calcium hypochlorite have been placed in the wells and allowed to remain there for some days and then pumping operations begun. A number of wells have been freed of infection in this way.

During the calendar year ended December 31, 1914, there were 150 successful artesian wells drilled, as compared with 84 during the six months ended December 31, 1913; 145 during the fiscal year ended June 30, 1913; 147 during the fiscal year ended June 30, 1912; and 224 during the fiscal year ended June 30, 1911.

REPORT ON INFANT MORTALITY.

The committee composed of Dr. W. E. Musgrave, Chairman; Dr. Luis Guerrero; Dr. Proceso Gabriel; Dr. Joaquin Quintos; and Dr. José Albert, appointed under authority of a law enacted

by the Legislature for the purpose of investigating the causes of the excessive infant mortality in the Philippine Islands and reporting upon measures which should be adopted to decrease it, made its report to the Legislature during the year and submitted the following recommendations:

1. The infant mortality problem, like poverty, ignorance, or any other sociologic problem, is eternal. The study of methods for its relief should be continuous and the application of remedies is a fundamental duty of the State.

2. The present excessive infant mortality rate by which 135,000 of the 210,000 potential citizens of the country are sacrificed before they are 5 years old, and less than one-third of the children conceived live to be 1 year of age, is a serious menace to progress, a disgrace to our civilization, a criticism of our Government, a shame to our Christianity, and a sociologic crime.

3. Apologies and excuses will not correct the conditions nor will they much longer be accepted by an advancing civilization. All other countries worth the name are awake and active in the campaign of saving the lives of their citizens with at least the same effort that is devoted to securing police protection, collection of taxes, conservation of forests, or in animal husbandry. This country must apply remedies to this, its most important sociologic and economic problem, or disaster is certain.

4. Insufficient funds—lack of money—is the excuse or apology that has been offered for not curing this gruesome canker which is eating at the vital centers of the body politic. The excuse is not valid. A captain who failed to answer a call of distress at sea because he was short of coal would be punished; a police officer who failed in his duty because the odds were against him would be dismissed in disgrace; a fire department that failed short of almost superhuman efforts to save a burning building containing helpless children would be censured and its directors punished; and yet a Christian civilization with a modern form of government will allow more than 100 helpless babies to die a day in the Philippine Islands of easily preventable causes. How long will the excuse of insufficient funds be accepted as a satisfactory explanation of such a state of affairs?

5. That *health is a purchaseable commodity* is accepted as a fact and bears the stamp of approval of every society, organization, and student of public-welfare work. If the Philippine Islands spent as much for health purposes as it does for police protection, the lives of at least 25 of the infants daily sacrificed could be saved and a vast improvement in the health conditions of others secured. If we spent as much for health purposes as is appropriated for the prosecution of crime and the protection of society from criminals, we could save the lives of 10,000 babies a year and improve the health and social conditions of thousands of others who, under present conditions, are destined to join the class of criminals and deficient.

An additional 1 centavo stamp placed upon every letter mailed in the Philippine Islands would furnish money enough to save the lives of 25,000 babies a year and increase the health efficiency and earning capacity of this country enormously.

The cry of "insufficient funds" is not a valid excuse for a continuation of the criminal waste of human life which constitutes the excessive infant mortality in this or in any other civilized country.

6. More infants die out of every 100 births in the Philippine Islands than die out of every 1,000 born in Australia.

The adoption of the Australian Government methods by this country would decrease our present infant mortality 25 per cent in two years.

7. The authority, responsibilities, organization, personnel, and appropriations of the public health department should be extended so as to provide at least the most elementary sanitary and health protection for 100 per cent of the population of the country.

The department should be an Insular organization with greater authority which should be centralized. Provincial and municipal autonomy in health matters is a mistake.

The organization of the department should be modified to include divisions of child hygiene, public welfare, public charities, and other important branches of public health and social betterment work which now are being neglected.

The personnel should be made up of permanent positions filled by persons selected by a merit system with definite lines of promotion and subject to the orders of the central executive office.

The 20-centavo per capita health fund must be increased if the requirements of civilization are to be met in the discharge of generally accepted governmental obligations to its citizens.

8. Charity, philanthropic, social betterment, and other public-welfare societies and movements should be coördinated and combined as closely as possible with appropriate divisions in the public-health service. Government funds for such purposes should be appropriated only to organizations with governmental affiliation.

9. Manila and some of the other cities should have a number of *combined* baby clinics, "milk stations," or "Gota de Leche" units, day nurseries, mothers' consultations, "welcomes," etc., where suitable instruction and nourishment may be supplied to the deserving poor. The work of such units should be followed up by visiting nurses.

10. In their importance as mortality and morbidity influences upon adults and children, the following diseases and disease conditions take rank in the order mentioned: Beriberi, tuberculosis, diseases of the respiratory system, gastrointestinal diseases, diseases of the nervous system, social diseases.

11. The redistribution of wealth and alterations in financial balance are parts of the social, political, and economic evolution through which this country is passing. The question should be studied by competent students and an effort made to counteract the ever-increasing phases of poverty which are developing.

Most countries and most large corporations are meeting these requirements by some form of industrial and health insurance. The subject should be studied with a view to establishing appropriate methods of relief in this country.

12. The earnings of unskilled labor must be increased; the cost of living decreased, or material advancement of this people is impossible.

The average monthly earnings of unskilled labor in this country do not exceed ₱18 (\$9). The average number of persons dependent upon the earning unit will average four. The money available per person, therefore, will not buy sufficient good food to maintain the body in health, to say nothing of the other expenses necessary to life and a reasonable amount of comfort.

13. It is necessary to have guards at the doors of hospitals in Manila to prevent the entrance of the homeless, the blind, the hopelessly incurable, the aged and the infirm, and others ill and deficient from many causes.

According to the official reports of the Director of Health there are more than 2,000 insane persons in the Philippine Islands who should have institutional treatment. These persons are a charge upon poverty-stricken relatives and go on propagating their kind without restriction. There are towns in the country where 10 per cent of the inhabitants have active tuberculosis, and these diseased persons eat and sleep with healthy persons and infants. They go on propagating their kind without any knowledge even that they are causing the death of their own children and without any municipal effort to control the disease. In the same towns, if rinderpest breaks out among the small herd of carabaos, the resources of a bureau are called into service and very properly so.

In many places the spleen index shows from 20 per cent to 60 per cent of the children to have malaria, and mosquitoes breed unrestrictedly about the streets and around the houses.

Dysentery and other gastrointestinal diseases continue to be of wide distribution because the sewage and waste is scattered at convenient places about the villages, and even in larger towns but little effort is made to destroy or bury these poisonous wastes and breeding places for flies.

A dozen babies in the city of Manila and a hundred elsewhere will die to-day and every day this year because the mothers have not enough food to sustain their own lives and those of their children.

Seventy-five thousand babies are to-day nursing poor quality milk from the breasts of undernourished and sick mothers, and another 50,000 are eating dangerous and poisonous mixtures given in the name of food. Many of these babies even in the city of Manila are being fed mixtures so badly contaminated that 10 drops of the food injected into a guinea pig causes the death of the animal from blood poisoning within forty-eight hours.

14. Nearly 400 public prostitutes ply their trade in the city of Manila under an unofficial system of Governmental supervision. Most of these women are infected with gonorrhœa or syphilis. More than 75 per cent of the hundreds of public dance-hall girls around Manila are infected with venereal diseases and these diseases are spreading rapidly through all phases of society.

FRAUDULENT MEDICAL ADVERTISING.

The Legislature enacted Act No. 2342 entitled "An Act regulating the labeling, sale, and advertising of patent and proprietary medicines, fraudulent therapeutic appliances and devices, and for the protection of the people of the Philippine Islands against the exploitation of such articles." The law provides that no medical preparation except that of a licensed physician may be sold without the qualitative and quantitative formula being given on the label in terms such as may be found in the United States Pharmacopoeia or any standard formulary acceptable to the Bureau of Health. It also provides that no advertising of a patent medicine, whether by circular, handbill, pamphlet, newspaper, book, or periodical shall contain any mis-

leading or exaggerated claims or statements, and makes it the duty of the Bureau of Health, upon request, to pass upon the legality of all advertising matter which may be submitted to it. This has imposed considerable additional work upon the Bureau. The foregoing Act is further strengthened by Act No. 2333 entitled "An Act relative to untrue, deceptive, and misleading advertisements," which was also passed by the last Legislature. The following regulations were issued for the administration of the Act:

REGULATION 1.—*Advisory board.*

The Board of Food and Drug Inspection authorized in Executive Order No. 7, series of 1911, to act in an advisory capacity to the Director of Health in the administration of Act No. 1655, will, in accordance with Executive Order No. 52, series of 1914, also act in a similar capacity in the administration of Act No. 2342.

REGULATION 2.—*Preparation defined.*

[Section 1.]

(a) The expression "every preparation, whether of a simple substance or of compounded substances, for the prevention, alleviation, or cure of human ailments," wherever it shall occur in Act No. 2342, shall be held to mean any substance or preparation except those used exclusively for cosmetic purposes.

(b) The requirement with reference to labeling shall be interpreted that each package or part thereof shall have the formula attached to the container so that it may be easily read, and the label shall be in English.

REGULATION 3.—*Formula defined.*

(a) The word "formula" shall, for the purposes of this Act, be held to mean all medicinal ingredients and artificial coloring matter, exclusive of excipients, aromatics, and flavoring substances.

(b) The formula shall state accurately the medicinal ingredients qualitatively and quantitatively, and shall be in English.

(c) The words "private formulas of legally qualified physicians" shall, for the purposes of this Act, be held to mean preparations that are compounded or prepared by legally qualified physicians of the Philippine Islands for an illness of a patient that actually exists at the time the medicine is given to the patient for whom it was prescribed.

(d) Pharmacists shall not be required to place the formula upon the containers of prescriptions of qualified physicians of the Philippine Islands if the prescriptions or copies thereof are on file and available for inspection at the pharmacy at which they are filled and are for the illness of a patient that exists at the time the prescriptions are written.

REGULATION 4.—*Cipher prescriptions prohibited.*

(a) Physicians are prohibited, by Act No. 1921, to write prescriptions for patients that cannot be filled at any legally authorized pharmacy.

(b) Secret, patent, or proprietary medicines, when prescribed by physicians, shall be properly labeled with the formula of said medicines.

REGULATION 5.—*Advertising matter.*

[Section 3.]

(a) Section 3 shall be held to mean that the advertising matter pertaining to all articles mentioned in this section shall be closely censored, and that nothing of a misleading, obscene, persuasive, or false character shall be permitted.

(b) No proprietary, patent, or secret cure or any fraudulent therapeutic appliance or device shall be offered for sale or given away in the Philippine Islands which is advertised in violation of section 3 of this Act.

(c) At the request of any manufacturer of a patent medicine, the Bureau of Health shall pass upon any formula or advertising matter submitted to it for approval in compliance with Act No. 2342.

REGULATION 6.—*Therapeutic devices to be tested.*

All therapeutic devices coming within the provisions of this Act shall be tested and favorably reported upon by the Bureau of Science before they shall be allowed to be sold or given away. The expense of such test shall be borne by the person or persons who dispose of such articles in the Philippine Islands.

REGULATION 7.—*Time limit imposed.*

The Act does not affect goods and advertising matter which shall be on hand or which shall have been placed on board ship for shipment to the Philippine Islands prior to July 1, 1914: *Provided*, That all such goods shall be sold prior to January 1, 1917: *And provided also*, That no goods ordered after June 1, 1914, shall be deemed goods in stock or in transit within the meaning of this regulation.

REGULATION 8.—*Limitations of these regulations.*

Nothing in these regulations shall be taken as a construction of any other Act than Act No. 2342.

SPREAD OF ATHLETICS IN THE PHILIPPINES.

It has been brought to the attention of the Bureau of Health that the article entitled "Spread of Athletics in the Philippines" which appeared in the annual report of the Bureau of Health for 1913, has created the inference that this Bureau is entitled to the credit of inaugurating and directly promoting the spread of athletics in the Philippines. Nothing could have been further from the intention of this office. It is so well known that the Bureau of Education is almost entirely responsible for the introduction of athletics and popularizing them, and the word "schools" in the Philippines is so intimately associated with the Bureau of Education, that this office had no other thought in mind, but that the Bureau of Education would be understood to be meant by everyone, and that credit would be given to it for the magnificent work which it has done.

In this connection attention is invited to the Athletic Handbook for the Philippine Public Schools, just published by the Bureau of Education as Bulletin No. 14—1913.

ROAD CAMP SANITATIONS.

Experience in the Philippines has shown, where large numbers of workmen are collected for the purpose of carrying out extensive public works such as the building of railroads, the grading of wagon roads, the laying of sewers, etc., that unless the rules of primary sanitation are carefully observed a high mortality and morbidity rate results in almost every instance. The principal trouble is usually due to intestinal diseases, the transmission of which is caused by the faulty disposition of human excrement.

On the new wagon road which was built from Baguio, at an elevation of 5,000 feet, to Bauan at the sea, a distance of 56 kilometers, 1,600 to 2,000 men were continuously employed for a number of months. This labor was largely recruited among the Igorot and Ifugao wild tribes. The former are frequently afflicted with or have among them carriers of bacillary dysentery. On this road project only one death took place and there have been but few cases of illness.

Malarial fever is also an important factor in camp life. An inspection made recently of the camps shows that while in many respects there is much room for improvement, the disposal of human excrement has been carried on in a sanitary manner, and it is to this that the good results are probably due.

A railroad is also being constructed between the same points with similar sanitary success, except that a high morbidity rate was continuously present among a group of Italian laborers employed on tunnel work who refused to carry out the sanitary measures advised for them, thus showing that the danger of the spread of disease is ever present.

PROVINCIAL HOSPITALS.

Most encouraging progress was made during the year in inducing the provinces to provide hospital buildings for the treatment of the sick. Unfortunately, the provisions of the Appropriation Bill were so restricted that it was impracticable to extend to the provinces the aid which they expected. In the Appropriation Bill for the year 1915 the Legislature has made provision for aiding these hospitals to a limited extent. Buildings have actually been provided and are available in Naga, Iba, and Tacloban. In addition, private hospitals have been established during the past year in Lucena, Laoag, and Vigan, which have been assisted by the Bureau of Health with medicines and supplies.

MOSQUITO FISH.

Through the Bureau of Science a supply of fish (*Gambusia affinis*) were obtained from Hawaii and placed in the fish ponds of Tondo, the esteros, fountains, etc. Up to the present time these mosquito-eating fish have proved of very little service because the mud fish, the local name of which is *dalag*, devour the mosquito fish. In fountains and other places where the mosquito fish were unmolested they kept the water free of mosquito larvae. In the opinion of Mr. Seale, the fish expert of the Bureau of Science, the *Gambusia affinis* will gradually establish itself and multiply in spite of its enemies.

SIBUL SPRINGS.

After many vexatious delays, the site for the proposed sanitarium at Sibul has finally been acquired by the Sibul Springs Improvement Committee which was appointed as the Government's representative under the provisions of Act No. 1981. Unfortunately, the time required to secure the site was so long that in the meantime the money appropriated for the construction of a sanitarium reverted to the Treasury.

The work of reconstructing the baths was well on its way to completion at the close of the year and the engineer in charge reports that by March 1, 1915, it will all have been completed. It is proposed to have various classes of accommodations available, which will range from a first-class private pool, for which a reasonable fee will be charged, to the baths which will be free to those who are unable to pay.

BERIBERI.

The useless sacrifice of human lives from beriberi still continues. The number of deaths reported in the city of Manila for the calendar year ended December 31, 1914, was 1,042; for the previous year it was 798. Not one death occurred in public institutions in which unpolished rice was continuously used. This, of course, does not include cases that were admitted to hospitals suffering with beriberi, but too late to be benefited by treatment. It is estimated that formerly there were at least 600 deaths annually from beriberi in public institutions, and the fact that this disease has been to all intents and purposes eliminated makes concrete proof of what might be accomplished if it were possible to bring about the use of unpolished rice among those classes that use rice as a staple article of diet. Health Bulletin No. 12, which contains a brief popular description of beriberi and how to prevent it, has been prepared by the Bureau of Health and

its contents are now being taught in the public schools. It is feared, however, that not much progress can be made in reducing the ravages of this disease unless some legislative relief is obtained. On account of the large trade interests involved and other factors, as well as questions of sanitary administration, it appears probable that the best results could probably be obtained by an international conference of representatives of all the oriental countries with a view to bringing about the enactment of uniform legislation.

CANCER.

During the early years of American occupation it was the general belief among medical men that cancer prevailed less extensively in the Philippine Islands than in the Temperate Zone. The opening of the Philippine General Hospital afforded an opportunity to study the disease on a large scale and under scientific conditions. While this experience has not been sufficient to draw definite conclusions, yet the indications are that cancer prevails as extensively in the Philippine Islands as elsewhere. Dr. George G. Davis, assistant professor of surgery, College of Medicine and Surgery, who has been on duty at the hospital, has recently reported 65 cases of oral cancer apparently very closely associated with the chewing of betelnut and the buyo leaf. This habit prevails very extensively in the Philippines. A slice of betelnut is placed upon a buyo leaf, ordinary lime is sprinkled upon it, and then it is wrapped up in the leaf and the whole morsel is placed in the mouth and chewed.

CEREBROSPINAL MENINGITIS.

The outbreak of cerebrospinal meningitis at the railway camp at Laguimanoc, mention of which was made in the last annual report, has completely subsided and only two authentic cases are known to have occurred anywhere in the Philippine Islands during the year. The diagnosis of these was confirmed by autopsy made at the city morgue.

CHOLERA.

During the early part of July cholera made its appearance almost simultaneously in Manila and at a number of places in Rizal and Bulacan and Pampanga Provinces. So far as known, there had not been any cholera anywhere in the Philippine Islands for a period of several months. Careful stool examinations are made of all passengers coming to the Philippines from foreign infected territory, but no cholera carriers had been detected since January 10, 1914, so that it seems unlikely that the disease was introduced from a foreign country. The out-

break was very similar to that described for the previous year in the last annual report, so that it would be a mere repetition to mention it in detail. After the disease once had been established there was no difficulty in tracing the majority of cases in new territory to a previous case. The disease on the Island of Luzon slowly spread as far north as the Ilocos Provinces and a few cases also appeared in Aparri, Cagayan Province. It spread as far south as the Province of Tayabas. A small outbreak occurred in Capiz Province, which was directly traced to infection at Manila. Several cases appeared in Iloilo and these were traced to Capiz, but no spread took place. The energetic work of the health officers in a number of other provinces prevented the disease from getting a foothold there. In Manila cholera carriers were found in very large numbers and these were isolated at the San Lazaro Hospital under the same quarantine restrictions as true cholera cases. This had been done during the previous year, but this time it caused more opposition, which was, however, successfully overcome and the entire press of the city finally came to the relief of the Bureau by advocating the measure. The number of the cases appearing in provinces and in the city will be found in the statistics division of the annual report.

DIPHTHERIA.

Diphtheria continued to occur in the city of Manila, but there was a slight reduction in the number of cases and deaths as compared with the year 1912, as may be seen from the following table:

Fiscal year.	Cases.	Deaths.	Fiscal year.	Cases.	Deaths.
1900	1	1	1907	15	13
1901	0	0	1908	18	9
1902	4	4	1909	7	0
1903	2	2	1910	28	10
1904	4	4	1911	25	16
1905	7	7	1912	49	17
1906	8	8	1914	38	13

All contacts with diphtheria cases, in so far as practicable, were examined for the Klebs-Loeffler bacillus, and those who were found positive were quarantined at the San Lazaro Hospital. This procedure at first gave rise to considerable opposition, but as the object became better understood the opposition gradually subsided.

LEPROSY.

The treatment of leprosy with a hypodermic mixture of chaulmoogra oil at the San Lazaro Hospital by Dr. Eliodoro Mercado and at Culion by Drs. Paul Clements, José Martin, and Vicente Frias has continued to give encouraging results.

The undersigned reported four cases that had been treated with this mixture at San Lazaro Hospital and which apparently remained cured for a period of two years. The paper in which these cases were reported was printed as Supplement No. 20 to the U. S. Public Health Reports of October 16, 1914, and also in The American Journal of Tropical Diseases and Preventive Medicine for November, 1914, in both of which publications the details of the treatment, the formula used, etc., may be found.

Upon the request of the undersigned, the treatment will be given a thorough trial by the United States Leprosy Investigation Commission which is at present conducting work in the Hawaiian Islands. With the hope that the treatment might be further improved and placed upon a more scientific basis, the Secretary of the Interior named a committee composed of Dr. John A. Johnston, chairman, and Dr. Eliodoro Mercado and Dr. L. Ordonez, with Dr. Gervasio de Ocampo and Dr. Luis Guerrero as honorary members, to make a further study of it. This committee has placed 30 cases under this treatment. In addition to the foregoing, in order to test the value of the treatment in the different types of the disease, the writer started another series of 7 cases which is under the immediate care of Dr. Mercado, the house physician at San Lazaro Hospital. It is hoped that during the coming year the results of these various investigations will become available and that more definite statements can be made in the near future with regard to the value of the treatment.

The work of segregating the lepers in the Philippines has been continued and for the year covered by this report 837 cases were admitted to the Culion leper colony. For the previous year 795 cases were admitted, from which it will appear that the number of new cases is slightly greater than for the preceding year. There is every reason to believe, however, that the cases that were admitted during this year on the whole were very much less advanced than those which have been admitted heretofore.

MALARIA.

During the year the Bureau of Science made extensive investigations into the question of malaria transmission. The work was conducted by Dr. M. A. Barber and other members of the staff, and the results are of far-reaching importance and it is hoped will be of great assistance in attacking the malaria problem in the Philippines. The investigations showed that there is very great doubt as to whether the *A. rossi* in the Philippines is implicated in the transmission of the disease. In brief, the result of the work done showed that the *A. febrifer* is prin-

cipally responsible and to a lesser extent the *A. maculatus*. The *A. febrifer* is widely distributed and breeds principally along the edges of rapidly flowing streams. The adult seeks shelter in houses and readily bites human beings. A spleen examination made of over 7,000 school children showed that the largest percentage of infection occurred near the breeding places of the *A. febrifer* and *A. maculatus*. The eradication of the *A. febrifer* seems practicable. Doctor Barber, for instance, on the Calamba sugar estate, found that at a comparatively small cost the banks of the streams could be cleared and oil effectively applied with a broom.

DISTRIBUTION OF QUININE.

Under the plan approved by His Excellency the Governor-General, and as outlined in the last annual report, quinine was distributed as follows:

	Tablets.		Tablets.
Butuan, Agusan	5,000	Santa Cruz, La Laguna.....	35,000
Albay, Albay	30,000	Tacloban, Leyte	50,000
Naga, Ambos Camarines.....	50,000	Calapan, Mindoro	20,000
Balanga, Bataan	15,000	Bontoc, Mountain	40,000
Basco, Batanes	10,000	Baguio, Benguet.....	
Batangas, Batangas	25,000	Cabanatuan, Nueva Ecija.....	30,000
Tagbilaran, Bohol	40,000	Bayombong, Nueva Vizcaya..	10,000
Malolos, Bulacan	25,000	Puerto Princesa, Palawan.....	5,000
Tuguegarao, Cagayan	25,000	San Fernando, Pampanga.....	25,000
Capiz, Capiz	35,000	Pasig, Rizal	25,000
Cavite, Cavite	20,000	Catbalogan, Samar	45,000
Cebu, Cebu	55,000	Surigao, Surigao	15,000
Vigan, Ilocos Sur.....	45,000	Tarlac, Tarlac	15,000
Iloilo, Iloilo	30,000	Lucena, Tayabas	40,000
Ilagan, Isabela	20,000		

This quinine is sold by municipal treasurers at the rate of $1\frac{1}{2}$ centavos ($\frac{3}{4}$ cent) for each 0.3-gram (5-grain) tablet. Figures are not yet available upon which to base an estimate as to whether there has been a reduction in the morbidity and mortality from malaria as a result of making quinine more available. At best, of course, quinine distribution can only be palliative and the problem resolves itself into preventing the breeding of mosquitoes that carry malaria.

PLAGUE.

It is satisfactory to report that there have been no cases of human or rat plague anywhere in the Philippine Islands since September 12, 1914, and it is believed to be safe to state that the disease has been completely extirpated. From January 1 to

September 12 there were 26 cases of human plague with 22 deaths.

The antirat campaign was vigorously continued throughout the year. At times considerable opposition was encountered in enforcing rat-proof construction, but this lessened very appreciably when the occupants of premises began to report the freedom from rats which they experienced after rat proofing had been done and it became apparent that absence of rats not only meant absence of plague but also was of great economic advantage on account of the property saved. There is much reason to believe that the campaign against rats was greatly assisted by the flood which occurred last September. A large section of Manila was inundated and particularly places where plague rats had heretofore been found. Large numbers of rats were either directly drowned or were driven into places where they could be readily killed. A detailed description of plague in the Philippines may be found in an article by the undersigned published in the Philippine Journal of Science for February, 1914.

The plan of building the rat out of existence has been in active use by the Bureau of Health for over ten years, and in carrying it out various health regulations which had the force and effect of law were issued from time to time. It was deemed best, however, to place this legal authority under one head and upon the recommendation of the Bureau of Health the Municipal Board enacted the following ordinance:

AN ORDINANCE PROVIDING FOR RAT-PROOF CONSTRUCTION OF BUILDINGS.

Whereas, in accordance with the provisions of Act Numbered Eleven hundred and fifty of the Philippine Commission, the Director of Health has drafted and forwarded through the Secretary of the Interior to the Municipal Board of the city of Manila for enactment, a proposed health ordinance relating to the safeguarding of the public health by providing for rat-proof construction of buildings, which proposed ordinance is duly approved by the Secretary of the Interior; and

Whereas the said Municipal Board deems it advisable to enact the aforesaid proposed ordinance in the form in which submitted: Now, therefore,

Be it ordained by the Municipal Board of the City of Manila, that:

SECTION 1. All buildings hereafter to be erected within the city of Manila shall be so designed, planned, and constructed that they will not have hollow walls or partitions, hollow ceilings, hollow stairs, hollow floors, nor hollow columns, or other hollow structural parts which may serve or tend to harbor, shelter, or provide access or entrance to rats or other similar vermin. All walls, with the exception of solid wood framing and of partition walls not extending below the floor surface, shall be of concrete, brick, stone, mortar, or other material proof against the incursion of rats to a height of one meter from the ground and shall extend below the ground to a depth of at least twice the thickness of the wall.

Nothing in this ordinance shall be construed to prohibit the construction of double concrete, masonry, or steel walls, or hollow steel, iron, or concrete columns, provided that no entrance to hollow spaces are allowed.

SEC. 2. All buildings hereafter undergoing repairs to parts having hollow space shall be repaired in such a manner as to remove such hollow spaces as are reached by the repair work, provided the safety of the building permits such removal.

SEC. 3. It shall be unlawful for any person to construct or to cause or undertake the construction of any building or part thereof, or to repair or to cause or undertake the repair of any building or part thereof, which construction or repair shall not be designed so as, or shall fail in any respect, to conform to any of the requirements of this ordinance.

Every violation hereof by any person shall be punished by a fine not exceeding two hundred pesos, or by imprisonment not exceeding six months, or by both such fine and imprisonment, in the discretion of the court.

The word "person" as used in this ordinance shall be construed to import both the plural and the singular, as the case demands, and to include copartnerships or other commercial associations and corporations. When construing and enforcing the provisions of this ordinance, the act, omission, or failure of any officer, agent, or other person acting for or employed by any copartnership or other commercial association or corporation, within the scope of his employment or office, shall in every case be also deemed to be the act, omission, or failure of such copartnership, association, or corporation, as well as that of the person.

SEC. 4. This ordinance shall take effect on July sixth, nineteen hundred and fourteen.

Enacted, June 25, 1914.

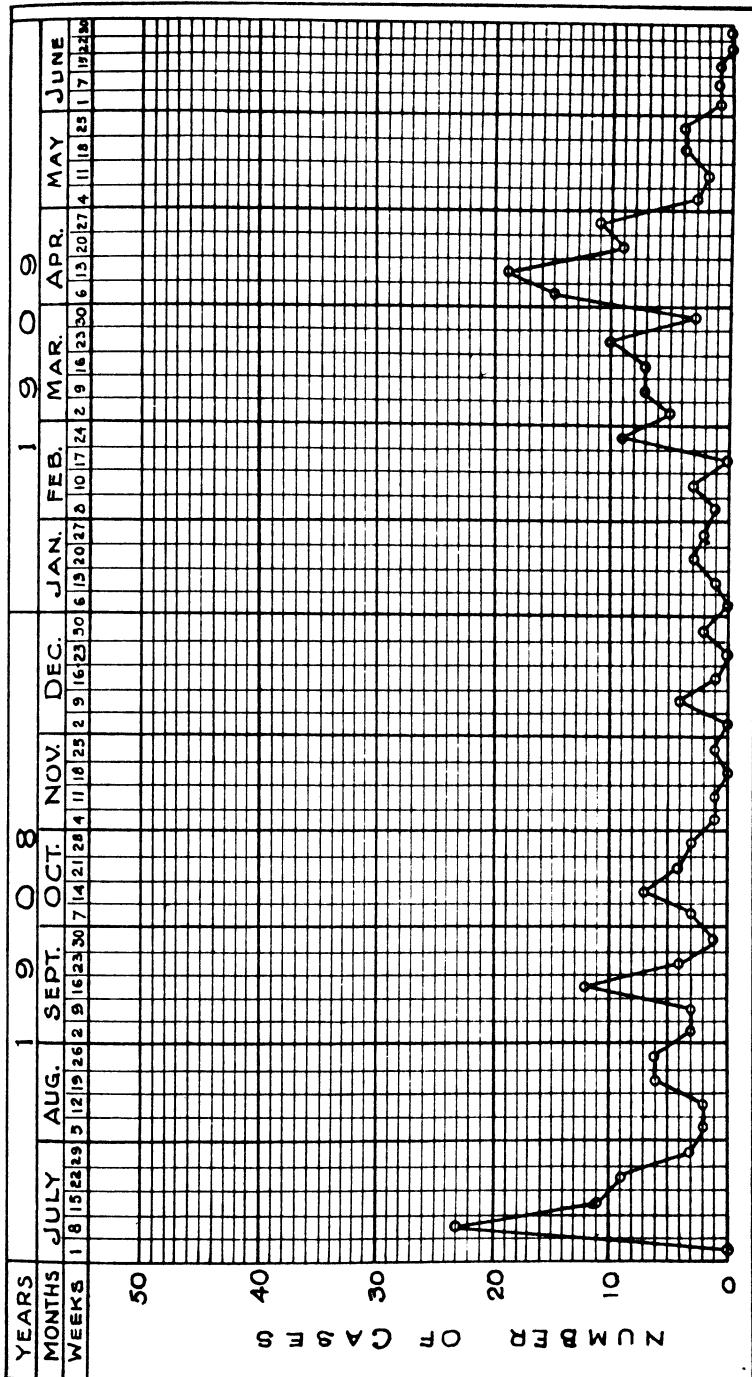
SMALLPOX.

The value of effective vaccination was still further demonstrated by the experience of the past year. Serious outbreaks of smallpox occurred among unvaccinated children and other unprotected persons, especially in the Provinces of Samar, Leyte, and Surigao. Many would, no doubt, have been averted if the local health officers had carried out the regulations of this Bureau which require that all unvaccinated persons shall be vaccinated during the months of July and January of each year. Some of the disease was due to the fact that it has been impossible to deliver potent vaccine into the more remote sections of the Philippines.

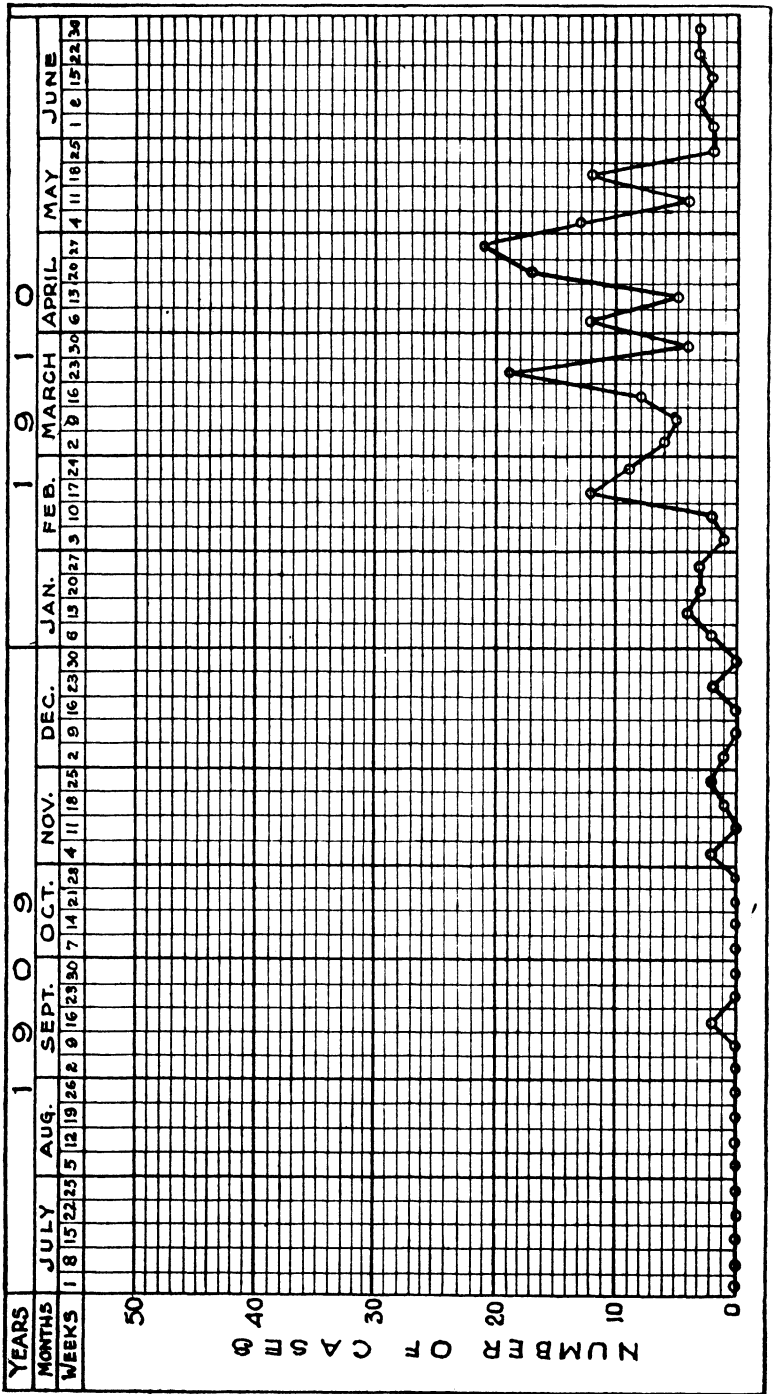
The intimate relationship between the height of the annual smallpox curve and the dry season is strikingly illustrated by the following charts. In Manila the driest period of the year usually occurs in February or March and when several weeks are allowed for the inoculation of the disease it will be seen that the two periods are very closely associated.

DRY VACCINE AGAINST SMALLPOX.

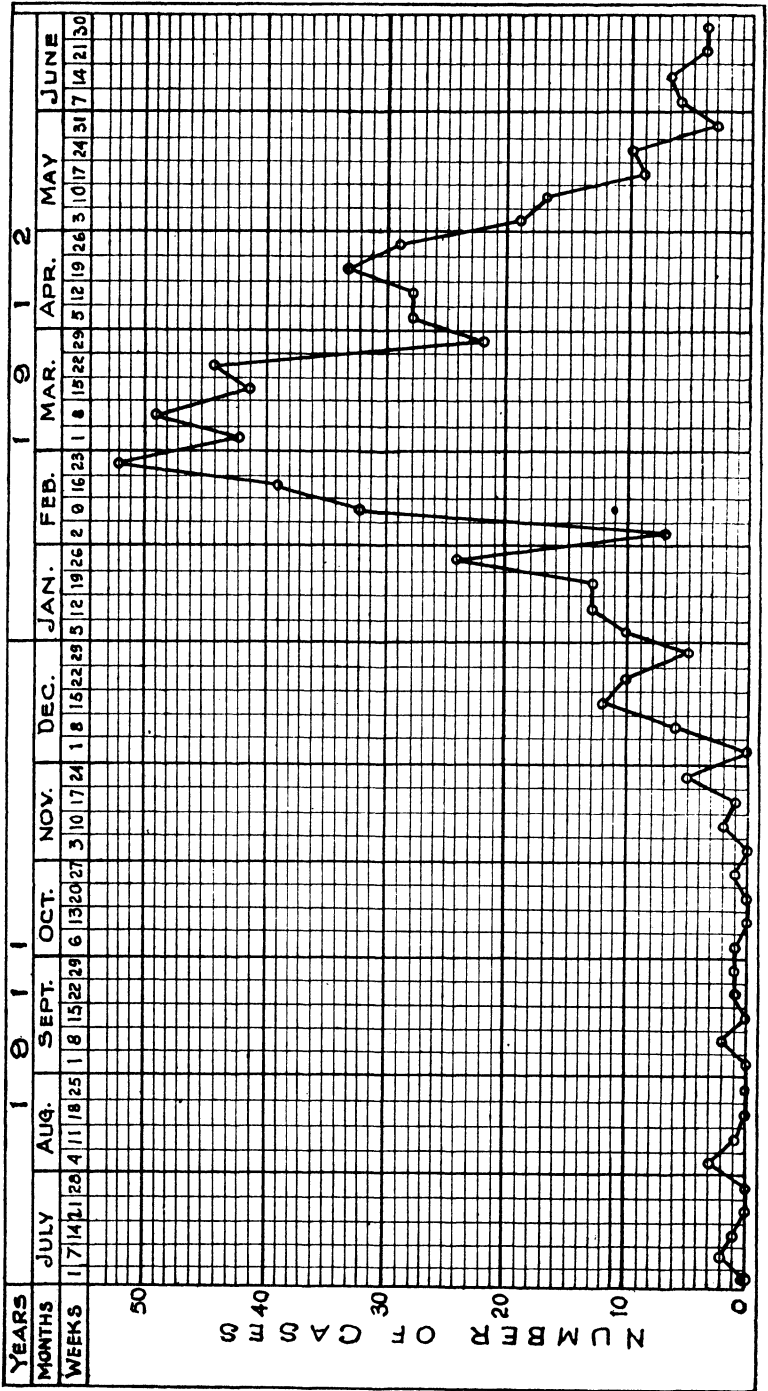
One of the big problems that has confronted the Bureau has been to deliver potent vaccine to the remote parts of the Phil-



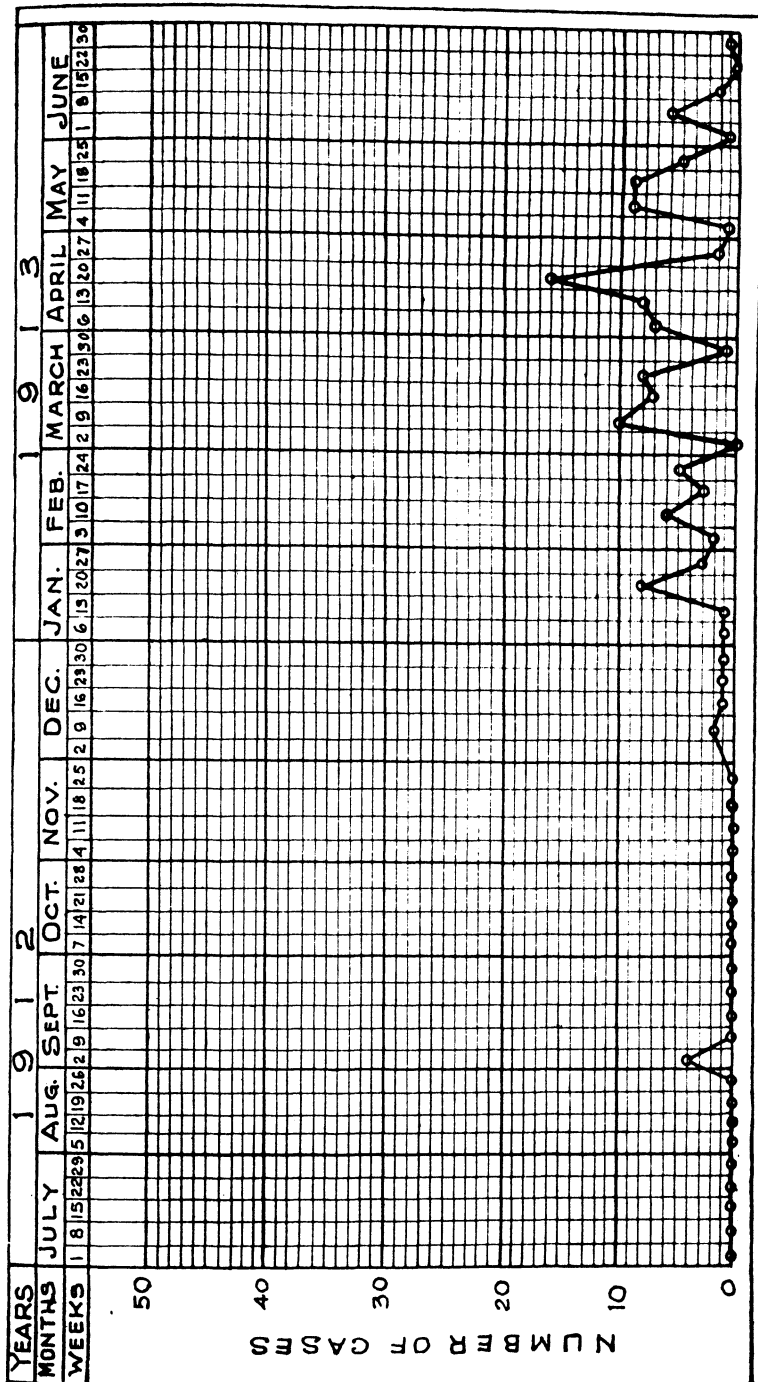
Smallpox and varioloid cases admitted to the San Lazaro Hospital Division during the period from July 1, 1908, to June 30, 1909.

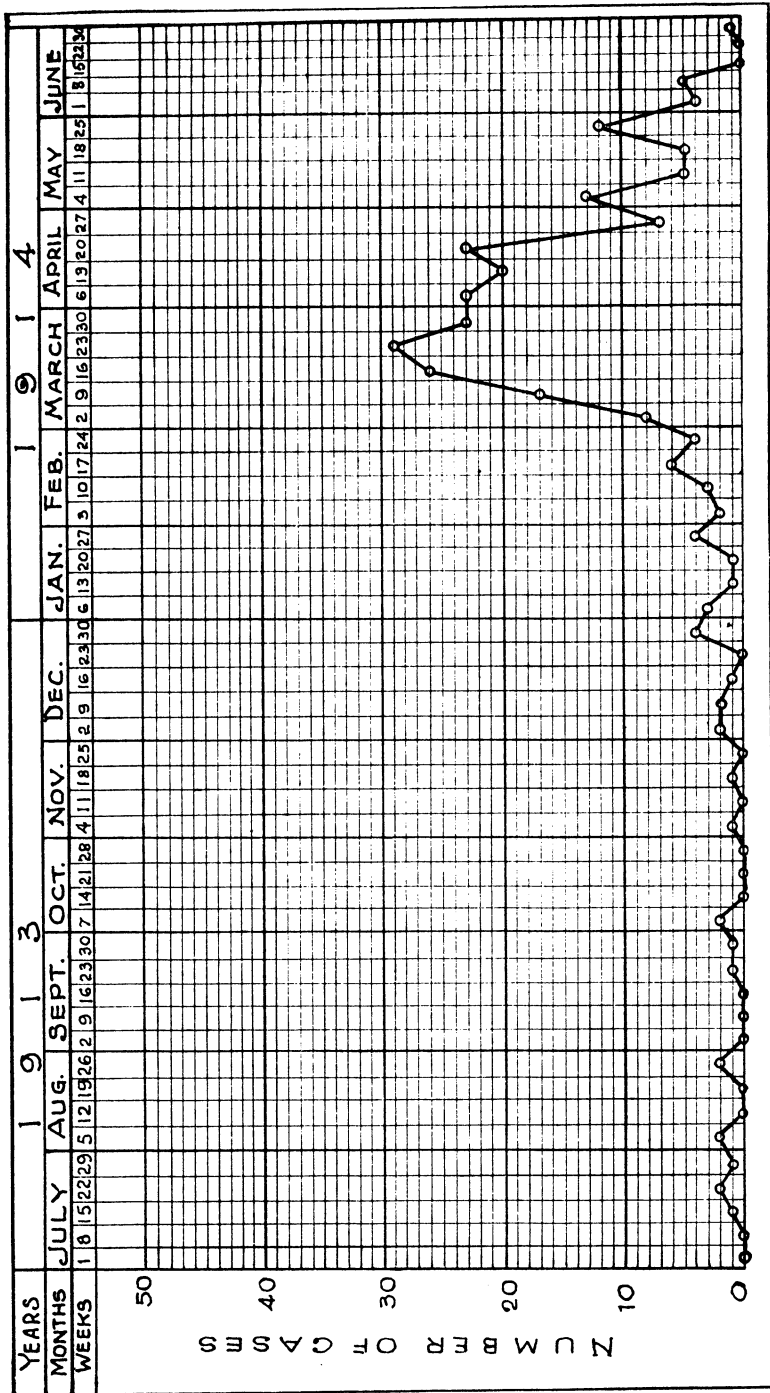


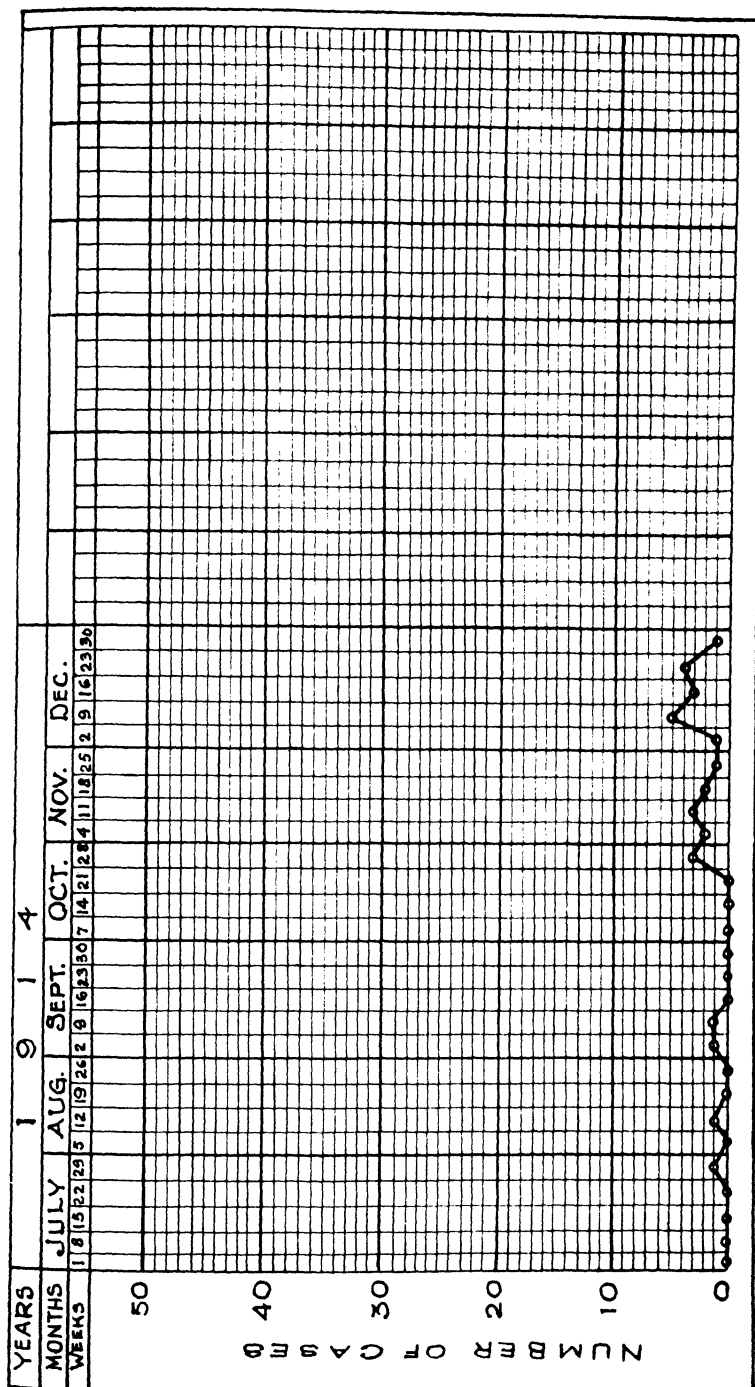
Smallpox and varioloid cases admitted to the San Lazaro Hospital Division during the period from July 1, 1909, to June 30, 1910.



Varioloid cases admitted to the varioloid department of the San Lazaro Hospital Division during the period from July 1, 1911, to June 30, 1912.







Smallpox and varioloid cases admitted to the San Lazaro Hospital Division during the period from July 1, 1914, to December 31, 1914.

ippines. There are many places that cannot be reached in several weeks from the place of the last ice supply. In this climate glycerinized lymph cannot be depended upon to remain potent for a longer period than one week after it leaves the ice. For many years every effort has been made to solve this problem. The Bureau of Science has given much time and attention to it, as well as large manufacturing firms in Europe and the United States. Finally, the H. K. Mulford Company furnished a sample shipment of powdered vaccine which was kept for several months at ordinary temperature and then gave 85 per cent of positive results in unvaccinated children in different series and under varying conditions. The total number of cases vaccinated being 79, with 61 positive "takes."

A large shipment was then ordered, but this proved a complete failure. No better success has been had with a second shipment.

The project of establishing a small vaccine laboratory in the remote country to be vaccinated has not been deemed practicable by the Bureau of Science. Further work in this direction is urgently demanded, because persons are dying of smallpox in remote places, who could be saved if successful vaccination were possible. Mr. Thomas Edison has interested himself in this matter with the hope of inventing a box that can be kept at a temperature of 0 C. for several weeks.

TYPHUS FEVER.

Capt. George B. Foster, Medical Corps, U. S. Army, reports a small outbreak of typhus fever among the residents of Dansalan in Mindanao. This is the first time that the disease has been definitely reported in the Philippines. It seems likely that it was introduced by some Japanese laborers who came from Japan at a time that the disease prevailed very extensively in that country. Capt. E. W. Ames of the Constabulary, who is the health officer for the district, reports there were in all 18 cases with 1 death.

A few cases, suspicious of typhus fever, have been reported in Manila, but the diagnosis was not satisfactorily established.

TYPHOID FEVER.

The examination of blood specimens of cases of typhoid fever occurring throughout the provinces has been largely extended and there is considerable evidence that the disease is widely distributed over the Philippine Islands. No large outbreak was reported, but the disease threatened to become epidemic in La Union and Pangasinan Provinces and in the city of Manila. In

Manila five cases occurred over a period of four months among persons who worked in one office building, and while no definite connection could be traced between the cases, it seems probable that the subsequent infections were contracted from an office boy who had the disease during September.

Wherever typhoid fever appeared, prompt measures were taken to suppress it and instruction by public lectures, by letter, pamphlet, and through the press has been issued from time to time with the view to reducing the danger of spread of infection.

TYPHOID VACCINATION.

The Bureau has encouraged typhoid vaccination, but on account of lack of funds it has been impossible to undertake this work on a large scale. All nurses and other persons who are concerned with the nursing of persons in Government hospitals were requested to be vaccinated. At the Philippine General Hospital 123 female and 67 male pupil nurses were vaccinated. Twelve female and 5 male pupil nurses declined to take the vaccination. Among the first group 1 case of typhoid fever occurred, or a percentage of infection of one-half of 1 per cent. Among the unvaccinated group 2 cases of typhoid fever occurred, or a percentage of infection of almost 12 per cent. It is proper to state that the records show that the male pupil nurse who contracted typhoid fever was vaccinated in October, 1912, but no Widal reaction or other test was made in his case either before or after the vaccination in order to ascertain whether it had been effective. He nursed typhoid cases during the latter part of October, 1914, and was admitted as a patient with typhoid fever to the hospital wards on November 10, 1914. The diagnosis was confirmed by laboratory methods. On November 13 a blood culture was negative; on November 17 the Widal reaction was negative; but on November 21 the Widal reaction was positive in a dilution of 1 to 40 in about one hour.

WHOOPIING COUGH.

An epidemic of whooping cough, with comparatively high mortality in children under 2 years of age, has continued during the last four months of the year. Frequently these deaths are reported as acute bronchitis or broncho-pneumonia due to a previous attack of whooping cough. It is desirable that every possible effort be made to prevent the spread of this infection, since, if infants are protected from it until the third year, their chances for recovery are much better.

SEASONAL PREVALENCE OF DISEASES.

A study of the following table shows that there is very little difference during the various months of the year in the mortality rate for the diseases mentioned. Meningitis is apparently more frequent during the last three months of the year. Cholera shows also a periodicity.

Month.	Amoebic dysentery.		Bacillary dysentery.		Cholera.		Diphtheria.		Measles.		Meningitis.	
	Deaths, 1914.	Average, 1908-1913.	Deaths, 1914.	Average, 1908-1913.	Deaths, 1914 ^a .	Average, 1908-1913 ^b .	Deaths, 1914.	Average, 1908-1913.	Deaths, 1914.	Average, 1908-1913.	Deaths, 1914.	Average, 1911-1913.
January	1	2	2	2	17	94	3	0.6		0.8	12	9
February	1	1	1	0.8	6	6	1	1		1	21	11
March	2	1	1	1	4	3	2	1		1	14	14
April	1	0.8	1	1	1	1	1	1		1	30	16
May	2	1	5	1		2	1	.3		.1	19	17
June	2	2	2	2		12	2	.8		.1	16	15
July	2	4	5	2	37	17	1	.5		.1	19	19
August	4	3	3	4	61	26	2	.8			30	16
September	1	1	2	3	101	122	4	.1			28	25
October	1	2	1	2	26	68	1	.1		.1	13	25
November	3	1	1	1	13	31	1	1	1	.1	32	19
December	3	2		2	16	18	1	1			15	71

Month.	Pneumonia.		Smallpox.		Tuberculosis (all forms).		Typhoid fever.		Whooping cough.	
	Deaths, 1914.	Average, 1911-1913.	Deaths, 1914.	Average, 1910-1913.	Deaths, 1913.	Average, 1908-1913.	Deaths, 1914.	Average, 1908-1913.	Deaths, 1914.	Average, 1908-1914.
January	4	8		1	106	115	8	7		0.3
February	7	.5		0.1	93	105	10	6		.6
March	8	14		3	109	121	7	5		.8
April	3	9		4	101	107	10	7		.6
May	7	10		5	104	112	14	8	1	.6
June	1	6		2	92	117	11	5		1
July	9	5		3	115	128	6	6		.6
August	7	5		1	111	121	19	5	2	.3
September	1	8		1	110	114	16	8		.5
October	6	5		.6	112	112	16	6		.5
November	7	8		.5	117	113	8	6	4	.1
December	10	6		.3	123	117	11	6		.8

^a Includes 9 transients.

^b This average refers to those months only during which cholera occurred.

RECOMMENDATIONS.^a

The experience of the past year supplied additional evidence that the following recommendations which were made in the last

^a Since the foregoing was written, the Legislature has enacted legislation in accordance with recommendations Nos. 2, 4, and 8.

annual report should receive favorable action if the best interests of the health service in the Philippines are to be subserved:

(1) That an appropriation be made to construct additional buildings for the insane and to provide for the maintenance of a largely increased number. The present facilities are entirely inadequate to meet the needs of even the most urgent cases of insanity.

(2) That legislation be enacted for the more centralized control of sanitation in the provinces, with sufficient appropriations to improve the sanitary conditions.

(3) That legislation be enacted for the purpose of discouraging the consumption of polished rice among those who use it as a staple article of diet. The accomplishment of this object would probably result in the saving of many thousands of adult lives, prevent thousands of cases of illness, and bid fair to make a great reduction in the infant mortality.

(4) That there be constructed an additional isolating pavilion for dangerous communicable diseases and better kitchen facilities for the insane at the San Lazaro Hospital.

(5) That steps be immediately taken to provide an increased water supply for the city of Manila. The experience of the past three years shows that the shortage of water during the dry season is a serious menace to the health of Manila. This increased water supply should be sufficiently adequate to provide water for those towns in the Mariquina Valley and near Manila in which the installation of artesian wells has proved impracticable.

(6) An appropriation for a pupil nurses' home. The increased number of pupils at the Philippine Training School for Nurses authorized by the Legislature makes it urgently necessary to have additional living accommodations.

(7) That legislative authority be given to abate nuisances on private property and to make the cost thereof a lien against such property.

(8) That legislation be enacted to make compulsory the muzzling of dogs for several years. The enforcement of such an act and the regulation of the entrance of dogs into the Islands would result in the eradication of rabies, which is now responsible for many deaths each year.

(9) The appearance of cholera during the year has again forcibly demonstrated the desirability of additional research work with regard to this disease.

(10) On account of the large number of persons who contract leprosy each year and the enormous expense of maintaining them,

further research of the transmissibility and curability of this disease is urgently demanded.

(11) Additional funds should be made available to assist the provinces in the extension of the efforts which they are making to establish hospitals.

Respectfully submitted.

VICTOR G. HEISER.

Surgeon, U. S. Public Health Service,

Director of Health.

The Honorable

the SECRETARY OF THE INTERIOR,

Manila, P. I.

**REPORTS OF DIVISIONS AND BOARDS OF
EXAMINERS.**

REPORTS OF DIVISIONS AND BOARDS OF EXAMINERS.

The following reports are extracts from the annual reports of the chiefs of the respective divisions:

BAGUIO HOSPITAL DIVISION.

SUMMARY.

Patients remaining from fiscal year 1913.....	13
Patient admitted January 1 to December 31, 1914.....	739
<hr/>	
Total number of hospital cases during 1914.....	752
Patients remaining in hospital December 31, 1914.....	19
Persons accompanying patients in hospital.....	44
Visits to hospital clinic.....	7,809
Patients attending hospital clinic.....	3,233
Surgical dressings, hospital clinic.....	2,114
Prescriptions filled	5,630
Laboratory examinations made.....	662
Major operations performed.....	13
Minor operations performed.....	395
Prostitutes examined	109
Chauffeurs examined	14
Constabulary recruits examined.....	7
Americans treated in hospital.....	86
Filipinos treated in hospital.....	590
Japanese treated in hospital.....	31
Europeans treated in hospital.....	23
Chinese treated in hospital.....	9
Male patients treated in hospital.....	562
Female patients treated in hospital.....	177
Deaths in hospital.....	43
Vaccinations in Benguet subprovince.....	1,104

BAYOMBONG HOSPITAL DIVISION.

During the past year 85 patients were admitted to the hospital, 2 of whom died. The total expense of the hospital was ₱718.67, exclusive of the medical service.

DISPENSARY.

Two major operations and several minor ones were performed. A total of 2,131 patients were treated. The total number of prescriptions filled was 3,993. The district health officer also rendered necessary medical assistance to Constabulary troops during the absence of the Constabulary medical officer.

BONTOC HOSPITAL DIVISION.**GENERAL CONSIDERATIONS.**

The hospital is about finished; the service building, a two-story brick structure, is almost completed. The new ward will contain about 20 beds.

Concerning the hospital attendance, the number of patients admitted to the hospital and treated in the out-patient department has been steadily increasing.

During the year ended December 31, 1914, 520 cases were admitted to the hospital, with 502 recoveries and 18 deaths. According to these figures it will be apparent that the people of the Mountain Province are beginning to be convinced of the importance of the modern means of treatment.

SURGICAL DEPARTMENT.

There have been 14 major operations performed during the year and about 40 minor operations. With one or two exceptions, all the cases were Igorot patients.

OBSTETRICAL DEPARTMENT.

During the year there were 16 confinement cases. There have been no fatalities in this department during the year. The results secured have made the Bontoc Hospital very popular. We have been compelled to improvise a temporary delivery room for this purpose. Cases are now beginning to come from all parts of the Mountain Province.

BUTUAN HOSPITAL DIVISION.

There were 242 persons admitted to the hospital, of whom 17 died. At times there have been more applicants for admission than space available. Subsistence and maintenance expenses for the year were ₱1,822.77; income, ₱813.72; net expenses for subsistence and maintenance, ₱1,009.05.

Cases treated at the dispensary during the year.....	4,522
Visits to outside patients.....	332
Tooth fillings	86
Tooth extractions	129
Minor operations	162
Prescriptions	6,039

CLERICAL DIVISION.

The firmer hold which sanitation has taken upon all sections of the Islands, is indicated by the more intensive work in the municipalities during the past year. This broadened scope necessarily entailed an increase in work for the clerical division, which serves as a general clearing house for the Bureau.

Cholera, with the extraordinary measures its presence occasions, also added to the work, and no effort was spared to expedite the measures employed against it, so far as they pertained to this division.

An "information" section was added to the division and resulted in a considerable increase in the work conducted over the telephone.

All of the routine work of the division has been kept up despite the fact that it was particularly heavy in the financial section, whose employees are to be commended for the spirit in which they met the extra duty and overcame it regardless of hours and holidays.

CULION LEPER COLONY DIVISION.

The permanent construction, accomplished in the colony proper during the year covered by this report, includes two concrete lavatories with the necessary sewer connection, and a building intended for the isolation of those inmates of the colony who have been found negative bacteriologically on one or more occasions.

Lavatory No. 6, on the road around the south side of Colony Hill, about half-way between the hospital and the crematory, the necessity for which was mentioned in the last annual report, was constructed during the early part of the year, being opened for use in May.

It is externally of the standard type used here, but a considerable improvement was introduced in its interior construction in the shape of bowls hollowed in the concrete floor instead of the cast-iron raised bowls formerly installed in these buildings, on top of which the colonist invariably climbed and squatted, instead of sitting. Imbedded in the floor are water-service pipes leading to hemisphere sprays located in the perimeter of the bowls, which distribute water in such a manner that all parts of the bowl's inner surface are thoroughly cleaned. The floor surface slopes toward the bowls from all directions, so that they also act as floor drains, when the floors are washed down.

Lavatory No. 7, which is immediately in the rear of the auxiliary women's hospital, for the use of which it was constructed, has the same type of interior arrangements as No. 6, but is smaller, having only three latrine bowls, besides baths and space for the laundry work, and varies somewhat from the standard type in outward appearance.

To complete the connection of these two buildings to the sewer system, the construction of 200 additional lineal meters of sewer and 4 manholes was necessary.

The Negative House, situated on the northern slope of the hill below the church and about half-way down, is in effect an enlarged and improved tenement house. On the upper side toward the church it is one story in height, but has two stories on the lower or north side. It has six rooms instead of five as in the other tenement houses, each room opening on to an arched balcony $2\frac{1}{2}$ meters wide along the north front. The lower floor is under the balcony only and contains separate lavatories for the two sexes, and a large kitchen provided with fireplaces in the native style, but constructed of concrete and firebrick. The kitchen also has water service and sinks. This building is also connected to the general sewer system by a special branch sewer 35 meters in length with 4 manholes.

The 14,000-gallon storage tank into which the water-supply main of the colony was led, having proved inadequate during the past two dry seasons, it was enlarged to 42,000 gallons during the latter half of the year. The original tank was 4 by 8 meters in area. At two of its corners the concrete was chiseled away to expose the reinforcing steel, to which that of the addition, 8 by 8 meters, was hooked. When the addition was completed, one side wall of the old tank remained as a partition between the old portion and the new. A liberal opening was then chiseled through this wall at its base, giving a free circulation between the two portions. This work was accomplished with no interruption whatever of the colony's water supply. The water formerly wasted between the hours of midnight and daybreak on account of the small size of the tank, is now stored and available for use during the day, and there has been no shortage of water during the few

weeks since the addition was put into use. It still remains to roof the new portion.

The terraces leading down from Worcester Plaza and the road connecting this plaza to the main colony level and passing down in the rear of the general kitchen and coöperative store, were both completed during the year. A road was also located by the sanitary engineer from the colony to the barrio of Baldad, and sufficient work was done on this location to preserve it and to convert it into a practicable foot trail. The construction of one bridge of rough-hewn logs was necessary. At first the lepers living in Baldad continued to prefer their old trail which was somewhat shorter but had to climb two steep hills, but they are gradually coming to use the new one. It is expected, by the use of leper labor, to gradually convert this trail into a cart road. Its length is about 4 kilometers.

In Balala, a new light-material house was constructed as a residence for the medical assistant, the removal of the old nipa building formerly assigned him as quarters having become necessary on account of its bad condition and insecure position on the edge of a bank of earth which was gradually washed away during successive rainy seasons. The new building has three rooms, porch, kitchen, and bath, and is located on a line with the sisters' house and Filipino quarters on the upper road.

The addition of two more sisters to the nursing force early in the year rendered their quarters inadequate, and this situation was met by building a 5-meter extension on the north end of their house, giving them an enlarged dormitory.

A portion of the upper road between Balala and the colony, which was relocated when the tramway was built and had never been finished, amounting to about 150 lineal meters, was used as a filling-in job during the latter part of the year, and is almost completed. The material excavated here has been deposited in the fill extending north from the administration building. The additional sea wall constructed along the face of this fill is on a slope of 5 to 1, in order better to resist wave and storm action.

The fencing of the cattle range at Ugnisan was completed and most of the cattle from Siuk were transferred to it. There are still a few at Siuk which we were not successful in rounding up.

During the previous year, a consideration of the cost of the roofing tile shipped to this division from Manila, and the large percentage of loss from breakage, in some shipments amounting to nearly 20 per cent, induced our valued constructing foreman, Mr. Morris, and the undersigned to experiment with making tile here. After we had been successful in producing a few tile by the use of wooden forms, these were sent to Manila as models from which cast-iron forms were to be made.

Four sets of cast-iron forms were delivered during the latter part of February, and the division began to make its own tile in March. They are made from a mixture of one part cement to three parts sand, poured very wet and remaining in the forms for approximately twenty-four hours. Four lengths of No. 16 black iron wire are used as reinforcement. After being removed from the forms they are placed in fresh water in a tank constructed for the purpose, where they are allowed to cure for about twenty-five days.

They are stronger than the pressed tile obtained from Manila which were formerly used here, but are not quite so smooth in finish. This, however, is only noticeable on close inspection. There is practically no breakage, and the cost is only a fraction over 7 centavos as against 18 for the pressed tile. Over 16,000 were made up to the end of the year. These tile were used to complete the roof of the theater, and to roof lavatories Nos. 6 and 7 and the

negative house, and there are sufficient on hand to cover the first of the buildings proposed to be constructed during 1915.

In place of the Audiffren-Singrün ice machine which we returned to Manila during the previous year on account of its failure to operate, a second machine of the same type was sent us in May. It was immediately set up and operated successfully for about a week, at the end of which time the motor became unserviceable through breakage of several important parts. Since the new motor was received in July, this machine has been operated almost continuously. Its product amounts to 200 pounds every eighteen hours, and the cost to produce this amount is ₱3.30. This high cost is due principally to the fact that the smallest power unit obtainable was one of 2 horsepower, which is more than is necessary. When we are able to assemble all of our machinery in one building, operating this machine as a part of a large plant, and applying just the power needed, the cost of ice can be reduced about one-half.

The roof of the theater building having been completed in May, a moving picture outfit, consisting of the machine proper and a dynamo geared to a 2½-horsepower gasoline engine, and furnishing a powerful arc light for projection and a number of incandescents for lighting the building, was received the last of the month, and has been successfully operated during the remainder of the year except for a few weeks when the dynamo was out of order and was sent to Manila for repairs. On each trip of the commercial steamer which touches at Culion, sufficient films are received to give two complete programs, which are repeated on one or two nights so that from four to six nights' entertainment are provided and all of the colonists have an opportunity to attend. The films are then returned to Manila on the return trip of the steamer. On account of having to return the films, no lepers are allowed to handle any part of the outfit, the films being exhibited by nonleper employees. As there is no provision for employees for operating the apparatus, it has been necessary to do so with volunteers, who fortunately have not been lacking. For the first two months it was necessary for the chief of the division personally to supervise each night's entertainment, but we now have several native employees who know how to operate the apparatus.

Through the heavy use to which our launch the *Culion* has been subjected during several years, its gasoline engine had become very much worn, and during the early part of the year it became unreliable, principally through defects which had developed in the water circulation system by which it was cooled. These defects became more and more pronounced and a serious crack developed in one of the main cylinder castings near its base. As far as possible, temporary repairs were made from time to time, but by August it could not be depended upon to make even a short run without giving trouble. A new engine was then asked for and was received in November. This engine is a four-cylinder, two-cycle, of 24 horsepower. It has been installed in the launch, which would now be again in use except for the fact that as a matter of economy it was desired to use distillate as fuel, and the generating attachment which was furnished for this purpose proved to be a misfit. This was returned to Manila along with the carburetor, and is expected back shortly, when the launch will be put into commission.

Our sailboat *Shamrock* was caught in heavy weather during the latter part of the rainy season and was beached near Ugnisan, springing some of her planking. She has been repaired and is in as good condition as ever. This was the only damage sustained from storm or weather during the year.

Several changes were effected in the internal administration of the colony during this period, principal among which were the establishment of an advisory board of lepers and a reorganization of the leper labor.

The advisory board was created in order to give the members of the colony a channel through which to express their desires and opinions upon matters affecting their interests. It consists of six members, chosen by tribal elections, one representing each of the principal tribes. It was originally intended to have eight members, one of whom should represent the various small tribal groups, but at the booth provided for this election as well as at that of the Pangasinan tribe, no votes were offered, so that two places remained vacant.

The board holds session twice a month, just as a municipal council. These sessions are presided over by the chief of the division. To the board are referred for discussion and opinion all matters affecting the government of the colony, and it has initiative in suggesting any changes relative thereto which it may deem desirable. Any matter on which there is disagreement between the board and the chief of the division is to be referred to the Honorable the Secretary of the Interior for decision. It is a pleasure to be able to state that the board has made a number of valuable suggestions and that no unadjustable disagreement has occurred. Those matters which have been referred for decision by higher authority have been such as were not within the competence of the chief to decide.

One of such matters was the reorganization of the leper labor. Early in the year, following a recommendation in the last annual report of this division, an increase in the amount of labor required of each able-bodied man in the colony from two days per month to four, was made.

This increase met with much opposition from the colonists, and particularly from that element which had been accustomed to pay substitutes to perform their labor. A deputation from this element early presented a petition asking that they be exempt from the required work in exchange for renouncing the gratuity.

The advisory board, immediately upon its organization, took the labor question under consideration, and recommended a return to the previous arrangement of two days per month. Upon reference to the Secretary of the Interior, it was decided to require no longer any labor without pay, to stop gratuities to all able-bodied men, to use the amount economized in gratuities in paying for the work formerly accomplished by the forced labor, and to give all whose gratuity was stopped an opportunity to earn an equivalent amount on the work.

This arrangement was at first objected to by the board, principally on account of a minor misunderstanding in regard to the last item, but was finally accepted by them and was put into effect during the latter part of the year. It has already been found that the labor is more efficient under this system than formerly. The larger portion of the excavation for lavatory No. 6 was performed by the leper labor. With this exception, it has been exclusively employed in road work and in keeping the colony in a sanitary condition.

One detail, however, remains to be arranged. The various leper employees, policemen, sanitary inspectors, nurses, cooks, etc., had always been exempt from the forced labor on account of their duties requiring their entire time, while they, as well as all other inmates of the colony, received the gratuity—this in addition to their salaries. As these employees are now classed as able-bodied, they no longer receive it, and in effect this amounts to a reduction of salary. In view of the fact that their salaries

are very small, in most cases from ₱3 to ₱5 per month only, the reduction by loss of the gratuity is, to them, serious, especially as they, in the nature of their duties, have no opportunity to earn money outside, and an increase of salary corresponding in amount to the gratuity cut off, is believed to be just and desirable, and has been recommended. No decision has as yet been received on this point.

A change has been made in the ration, substituting additional fresh fish purchased from leper fishermen, for a part of the beef formerly issued. By this change we are able to issue either beef or fresh fish every day. The protein value of the ration is very slightly reduced by this change, but the lepers are much better satisfied. The cost is approximately the same, and there is the additional advantage that a number of the lepers are enabled to earn good wages and thereby better their condition.

The European war was not without its effect on the problem of subsisting the colony. The threatened interruption in the supply of Australian meat led cattle owners in the neighborhood of Culion to believe that there would be a considerable rise in the value of beef and produced a very natural disposition on their part to hold their cattle for higher prices, so that the contractor for Culion's beef was forced to offer more, and in turn to raise the price charged the colony from 20 to 22½ centavos per pound. The Manila market having now apparently settled down to approximately normal conditions, a return to former prices has been arranged to take effect on February 1.

There is now no complaint on the part of the lepers with regard to the ration, except that the accessories such as sugar, salt, lard, and coffee are not sufficient in quantity. An increase of 3 centavos in the per diem allowance for the ration has been asked for in the estimates for the present year, in order to enable us to increase the issue of these articles.

Recommendation has also been made looking to the appropriation of funds for the purchase of additional carabaos and agricultural equipment, and for salary for an employee to superintend and promote the agricultural efforts of the lepers.

A portion of the hall over the store and post-office has been railed off as an office for the chief of the division, where the inmates of the colony are given an opportunity daily to present their requests and state their troubles.

There has been an increasing number of lepers to apply for settlement of property or interests which they had to leave behind at home when they were brought to the colony, and this has entailed considerable correspondence. In a number of cases, satisfactory settlements have been secured.

Two hundred and forty thousand nipa and nearly 3,500 bamboo were purchased during the year, most of which was distributed to the lepers and used for repairing and recovering their houses. There has been a certain amount of new nipa construction in the colony, and a good many additions to existing houses.

Authority has been received to construct an additional wing to the main hospital, an orphanage for the healthy children of leper parents, and residences for the sisters and for the chief of the division. An additional physician has also been granted, who will, by visiting sick in their houses who prefer to be so treated to going to the hospital, assist in relieving the constant strain upon the hospital facilities.

A number of bejuco bed bottoms were made for the hospital to replace canvas bottoms laced in, which had been found to be unsatisfactory.

Twenty-six were transferred out of the colony during the year. Two

of these went to San Lazaro in order to obtain treatment by a specialist, one was to be released, and the remainder were children of leprous parents who had so far shown no signs of the disease.

Dr. José Martin, for some years physician at the colony, resigned in March and was replaced, after an interval, by Dr. Ildefonso Alcantara, who, however, remained only about a month, being succeeded by Dr. Vicente Frias, who holds the position at present. Dr. Oswald E. Denney was also on duty at the colony for a part of December, during Doctor Frias's temporary absence, and much satisfaction has been expressed by the lepers at the prospect of his appointment as visiting physician.

Sisters Candide and Lucine augmented our nursing force early in the year. In July Sister Madeleine left and was replaced by Sister Suzanne in August. It would be difficult to do justice to the devotion of all the sisters to their work of charity.

Mr. Julio Lisboa, who succeeded Mateo Victorino as postmaster and clerk in the division office, has proved entirely acceptable in this capacity.

The other employees are the same. During the absence of the undersigned for nearly two months, Dr. C. E. Norris was sent down temporarily to take charge for a part of the time. During the larger part, the disbursing officer, Mr. Winslow, was in administrative charge and discharged these additional duties with his usual efficiency.

INSPECTION DIVISION.

PERSONNEL.

The personnel engaged in the city of Manila are distributed according to the following statement:

	Medical inspec- tors.	Municipal physi- cians.	Sanitary inspec- tors.	Regular assist- ant sani- tary inspec- tors.	Tempo- rary as- sistant sanitary inspec- tors.	Sanitary police- men.	Disin- fectors.
Station A	1	3	a 2	8	11	6	
Station C	1	2	1	5	9	3	
Station I	1	1	1	2	4	5	
Station J	1	1	b 1	7	4	3	
Station L	1	1	1	1	3	3	
Plague campaign	c 1		d 1	4			
Mosquito and fly campaign	e			2			
Disinfection service					f 2		g 6
Sanitary engineering division			1	2			
Property division			1				
Central office	h 2						
Prison sanitation division	1				1		
Special work	i 1						
Provincial work			3	43	51		
On leave	1						
Total	11	8	12	74	85	20	6

^a One internal-revenue agent appointed as sanitary inspector without additional compensation to inspect tobacco, cigar, and cigarette factories.

^b A sanitary inspector assigned to special work under the supervision of the Board of Food and Drug Inspection.

^c Chief, San Lazaro Hospital, in charge of plague campaign.

^d A sanitary inspector assigned to duty in connection with plague, mosquitoes, and flies.

^e Consulting entomologist, city of Manila, in charge of mosquito and fly campaign.

^f Temporary assistant sanitary inspectors assigned to disinfection service as chauffeurs.

^g Including one chief and one assistant chief disinfectors.

^h Temporary junior medical inspector assigned to the office of the Assistant Director of Health, and one medical inspector assigned to the Panama-Pacific Exposition.

ⁱ Medical inspector of public and private schools.

On account of the appearance of cholera in the provinces, there were appointed, by authority of His Excellency the Governor-General, during the months of August, September, and October, a total of 85 temporary assistant sanitary inspectors, who, after a few weeks' instruction in the sanitary stations of Manila, were sent to the provinces accompanied by permanent assistant sanitary inspectors to suppress the cholera existing there. On December 31, 1914, these temporary assistant sanitary inspectors were dropped from the service, not only on account of the practical disappearance of cholera, but also on account of lack of funds. Those provinces that still report some isolated cases of cholera are entrusted to the care of the permanent assistant sanitary inspectors. In the following tabulation will be seen the distribution in Manila and the provinces of the new temporary assistant sanitary inspectors and the permanent assistant sanitary inspectors who accompanied them:

Assignment of personnel.

CITY OF MANILA.

	Sanitary inspectors.	Temporary assistant sanitary inspectors.	Regular assistant sanitary inspectors.
Station A	2	8	11
Station C	1	5	9
Station I	1	2	4
Station J	1	7	4
Station L	1	1	3
Plague campaign	1	4	.....
Mosquito and fly campaign .....	.....	2	.....
Disinfection service .....	.....	.....	2
Property division	1	.....	.....
Prison sanitation division .....	.....	.....	1
Sanitary engineering division	1	2	.....
Total	9	31	34

PROVINCES.

Bataan .....	.....	8	.....
Batangas .....	.....	4	.....
Bulacan	1	3	1
Cavite .....	.....	3	1
Culion .....	.....	1	.....
Ilocos Sur .....	.....	5	12
Laguna .....	.....	2	2
La Union .....	.....	8	8
Masbate .....	.....	1	.....
Mindoro	1	1	14
Mountain .....	.....	1	.....
Pampanga	1	3	1
Pangasinan .....	.....	4	8
Rizal	2	2	3
Sorsogon .....	.....	.....	1
Tayabas .....	.....	2	.....
Total	3	43	51

NOTE.—Out of 85 temporary assistant sanitary inspectors, 34 remained in health stations, of Manila, and 51 were sent to provinces. Of the permanent ones, 40 remained in health stations of Manila, and 43 were sent to provinces.

The attached diagram shows the whole medical personnel engaged in the city of Manila and in the provinces, with some of the physicians in municipal sanitary divisions as provided by Act 2156. The small diagram placed between that of the city of Manila and that of the provinces, shows the brigade organized for the campaign against mosquitoes, flies, and rats.

SANITATION WORK IN THE CITY OF MANILA.

Cholera appeared in Manila on July 4, 1914, after about four months' absence. The cholera infection which had appeared on August 24, 1913, had continued until the first quarter of 1914, and terminated on March 11, 1914. From July 4, when the infection reappeared, until December 31, 1914, there occurred 441 cases with 245 deaths in the city.

From January to March 11, 1914, there were 49 cases with 26 deaths reported. The total numbers of cholera cases and deaths during the twelve months of 1914 are, therefore, 490 and 271. This is clearly shown in the following statement by months and by districts in the city of Manila.

Cholera in the city of Manila, 1914, by months and districts.

Month.	Health district.										Total.	
	No. 1.		No. 2.		No. 4.		No. 5.		No. 6.		Cases.	Deaths.
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.		
January	10	3	11	4	4	2	3	3	6	4	34	16
February	2	1	4	2	1	2	3	3			10	6
March			3	2	2	2					5	4
April												
May												
June												
July	7	6	21	16	6	5	10	8	1	1	45	36
August	13	5	19	11	22	14	42	26	6	4	102	60
September	43	18	56	15	15	10	62	46	26	11	202	100
October	4	4	14	6	5	1	17	12	1	1	41	24
November	3	3	4	1	8	4	9	3			24	11
December	1	1	6	2	4	5	11	5	5	2	27	15
Total	83	41	138	59	67	43	157	106	45	23	490	272

As may be seen, the month of September showed the greatest number of cholera cases and deaths, 202 and 100, respectively. The increase in the infection is probably due to the great flood that occurred in Manila from September 1 to 5, inclusive. The district that reported the greatest number of cases and deaths is Tondo, 157 cases with 106 deaths; the next in order being the district of Meisic, which reported 138 cases with 59 deaths.

Attention is invited to the fact that in all cholera epidemics in the city of Manila, Tondo is the district that reports the greatest number of cases and deaths. This is due to the insanitary conditions which still prevail in some portions of the district due to a dense and numerous transient population coming from the northern provinces.

CHOLERA VIBRIO CARRIERS IN THE CITY OF MANILA.

The sanitary measure of taking specimens of feces from all persons suspected of cholera, and from all those who are handling food for public consumption, is not new in the Bureau of Health, as it was begun in 1908, when specimens were taken not only for cholera purposes, but for typhoid fever and dysentery also. During this year and especially during the last semester, more attention was paid to this measure on account of the appearance of cholera, and it was ordered that specimens be taken from the personnel of all establishments that sell food, from confirmed or suspect cases, and from all contacts and persons living in the same block where a suspected case or a positive cholera vibrio carrier was found.

The hospitalization of these carriers was the cause of some protest on the part of a few who did not understand the benefits of such a measure to the community; but they soon yielded and instead of opposing the measure, finally became supporters of hospitalization. This change of attitude was largely due to the support given by the Filipino press through explanatory articles of a scientific and practical character. At the same time the Colegio Médico-Farmacéutico de Filipinas upheld the measure; and besides, the undeniable beneficial effects obtained, not only in the low mortality, which was 28 per 100, among cholera cases treated in San Lazaro Hospital, but also in the continued decrease of the infections in the whole city of Manila, became generally understood and appreciated.

Never in the experience of the Bureau of Health has such decided support been received from the press and from the inhabitants of the city of Manila in enforcing new measures to control any infection or epidemic in the city; and, for this reason, the Bureau of Health sincerely expresses its gratitude to the press, to the Colegio Médico-Farmacéutico de Filipinas and to the public in general for the assistance and coöperation given. The Bureau of Health believes that the hospitalization of cholera cases and cholera vibrio carriers is the most important measure in getting a cholera epidemic under control. The following is a statement showing the number of fecal specimens taken by each station in the city of Manila, and the number of positives found:

	Specimens	Positive.	Per cent positive.
Meisic, station A.....	15,561	254	1.63
Tondo, station C.....	6,398	44	.69
Sampaloc, station I.....	4,874	57	1.17
Intramuros, station J.....	7,100	154	2.17
Paco, station L.....	3,227	21	.65
Total.....	37,160	530	1.42

From the preceding statement of fecal specimens examined and the number of positive cholera vibrio carriers found, it will be seen that the average is 1.42 per 100. The Bureau of Science, however, states that the average number positive of all specimens examined is 3 per 100.

The explanation of this apparent discrepancy is that cholera cases and hospitalized carriers were repeatedly examined to determine their fitness for release, and were only discharged when negative for the cholera vibrio.

SMALLPOX.

No report of smallpox in the city of Manila has been received during the year 1914; but 293 cases of varioloid without deaths, were reported for the whole year.

VACCINATION.

There were 79,640 vaccinations made in Manila during the year 1914.

PLAGUE.

During 1914, 26 cases and 22 deaths of human plague were reported in the city of Manila. This infection has been limited to the city of Manila, probably due to the systematic work done and continuous effort expended by the personnel under the direction of this Bureau in the extermination of rats, as well as to the effective surveillance by the Quarantine Bureau of all steamers coming from plague-infected ports.

In selected sections of the city, the following number of rats were caught during the year:

Rats caught	118,282
Rats examined—	
Found positive	29
Found suspects	4
Found negative	118,249

TYPHOID FEVER.

The possibility that an outbreak of typhoid fever may develop in Manila continually exists, due to the occurrence of cases from time to time. Up to the present, however, nothing of importance has occurred, and constant vigilance is being maintained. During the year 1914 only 80 cases of typhoid fever were reported, though the death certificates received in the statistical division of this Bureau show 136 deaths from this disease. This indicates that an exact knowledge of the presence of the disease can only be obtained through the earnest coöperation of the medical profession of the city of Manila. Coöperation has been repeatedly requested by this Bureau, and, in addition, sections 762 and 763 of the Revised Ordinances of the city of Manila require them to report all cases of typhoid fever which they may find in the practice of their profession.

To assist in preventing the spread of typhoid fever, this office has issued instructions in Circular No. M-109, dated December 1, 1914, to all sanitary stations in the city, to submit for bacteriological examination samples of all milk sold in the market; to keep a careful watch on all dairies in each district; and to take fecal specimens from all persons employed in said dairies. Orders have also been given to make inspection of all restaurants, to have samples of the water and milk offered for sale examined so as to determine the degree of contamination or purity, and to see that employees of said restaurants are free from infection.

In connection with this circular, thousands of fecal specimens have been taken and sent to the Bureau of Science for examination for typhoid bacilli, but, fortunately, none of them were found positive. Similar negative results were obtained with drinking water and milk, many samples of which were sent to the Bureau of Science for bacteriological examination.

TUBERCULOSIS.

The campaign against this infection is entrusted to the Philippine Antituberculosis Society, who send their incipient cases to the San Juan del Monte Sanatorium and the advanced ones to the infectious diseases pavilion at San Lazaro Hospital. The Bureau of Health contributes to the work of the institution by furnishing medicines to the dispensaries in the city of Manila, and nurses and employees to the San Juan del Monte Sanatorium, and also by filling the prescriptions issued by the visiting physician of the Antituberculosis Society at the central pharmacy of the Bureau of Health.

EXAMINATION OF SCHOOL CHILDREN DURING THE WHOLE YEAR OF 1914.

A total of 43,411 children, of whom 8,240 are from provinces, and 35,171 from the city of Manila, were examined by the district health officers of the provinces and by the medical inspector of schools in Manila.

Of 43,411 examined, 14,289 were found to have defects distributed as follows:

Provinces.

Scabies	611
Miscellaneous	321
Pediculosis	223
Dental caries	189
Enlarged tonsils	141
Total	1,485

Manila.

Dental caries	3,894
Miscellaneous	1,926
Tinea	1,819
Bronchitis	1,801
Defective ears	860
Tuberculous adenitis	783
Acute conjunctivitis	454
Enlarged tonsils	345
Myalgia	342
Astigmatism	330
Myopia	250
Total	12,804

Total found with defects, of children examined, 14,289.

As may be deduced from the preceding figures, not all of the school children of the Islands have been examined, despite the efforts made by the health officers, on account of lack of personnel for this exclusive work. Every case of disease found among the school children in the city of Manila needing medical attendance, has been treated at the sanitary stations of the city and at the General Hospital.

THE WATER SUPPLY IN THE CITY OF MANILA.

The source of supply is located in the heights of Montalban; the quantity is generally sufficient for the needs of the city. It is estimated that fifteen million gallons daily are required, half of which is used for domestic purposes and the other half for drinking water, but sometimes during the dry season a temporary supply has to be obtained from the Mariquina and San Mateo Rivers at Santolan, as, occasionally, during the period of drought the supply at Montalban decreases to as low as four million gallons per day.

Since the water from Montalban has been available, the storage plant at San Juan del Monte has been utilized for clarification, purification, and sedimentation, and in order to better assure the purification of the water, sterilization has been carried out since the first quarter of the year, by means of calcium hypochlorite in a proportion of 14 pounds to one million gallons of water. It is estimated that this quantity gives one part of free chlorine to one million seven hundred thousand parts, by weight, of water.

Certain owners of houses and commercial establishments have drilled artesian wells for private use, principally for drinking purposes. Water from the artesian well of a private concern established at San Juan del Monte, and from an artesian well in Marilao, Bulacan, is supplied in demijohns to almost every hotel and restaurant and to many private houses in the city.

CITY MARKETS.

There are eight markets of modern construction in the city, including the two small ones in Pandacan and Gagalangin, respectively.

The inspection of these markets is usually made weekly, and it is a pleasure to state that in all of them there has been notable improvement in cleanliness and order and a marked decrease in the number of flies; particular mention of the Divisoria Market in the district of Tondo is made in this connection.

Each of the markets mentioned has restaurants or eating places where cooked food is sold at a low price and hundreds of persons are served each day. A notable improvement is, that the number of persons who use their fingers for eating purposes has decreased markedly; the majority of the people now use spoons, knives and forks.

PUBLIC SLAUGHTERHOUSES.

Besides the slaughterhouse in the district of Tondo which has been in use for many years, under the sanitary supervision of this Bureau, a new one of modern construction, under the care of the Bureau of Agriculture, has been built at Pandacan.

GARBAGE RECEPTACLES IN THE CITY OF MANILA.

According to City Ordinance No. 208, approved November 22, 1913, the sanitary stations in Manila require the owners, agents, or administrators of buildings (sec. 690) to provide themselves with garbage receptacles, which are the property of the city and rented at the rate of ₱1, ₱2, and ₱3, per annum, according to the size and capacity of the same and as divided into types A, B, and C.

During the year, about 16,000 orders were issued by stations to property owners to provide their buildings with garbage receptacles, as prescribed by city ordinance.

The following number of garbage receptacles was rented by the department of sanitation, city of Manila, during the year:

Type A	4,151
Type B	2,217
Type C	950

Some property owners do not have standard garbage receptacles as yet, due to the fact that the city has not been able to supply them in sufficient number.

PUBLIC WATER CLOSETS.

A total of 207 public water closets are installed in convenient sections of the city of Manila, distributed in the sanitary districts as shown in the statement below. During the year 1914, 9 public water closets have been installed—5 in Tondo, 3 in Sampaloc, and 1 in Paco.

Health stations.	Old.	New (1914).	Total.
Station A	18		18
Station C	89	5	94
Station I	32	3	35
Station J	17		17
Station L	42	1	43
Total	198	9	207

MOSQUITO AND FLY CAMPAIGN IN THE CITY OF MANILA.

The following report submitted by the consulting entomologist, city of Manila, in charge of this campaign, is quoted below:

"The DIRECTOR OF HEALTH, Manila, P. I.

"Sir: In accordance with your request, I beg to submit herewith a brief report of the work done by the mosquito brigade since its reorganization in November, 1914, together with a report on the work of fly extermination, a function which has been assigned to the brigade.

"PERSONNEL.

"In addition to the chief of the brigade, there are employed 8 assistant sanitary inspectors on mosquito work and 4 on plague work and a total of 19 laborers on mosquito work and 47 laborers on plague work.

"METHODS.

"The city, being divided into regular districts and the assistant inspectors being thoroughly familiar with its geography, it is the policy to start the crews at a given point and have them return to that point fourteen days afterwards.

"Certain districts of the city being more difficult of treatment and there being great necessity for keeping down mosquitoes due to the character of public institutions found in these districts, a crew is assigned to cover these districts once in seven days.

"Up to December 31, 1914, it was the policy of the city to flush out the drains in the Walled City, using the members of the fire department for that purpose. For some inexplicable reason this desirable practice was discontinued on that date. Inspectors are supposed to note and report on premises where flies are breeding and to warn the owners or occupants, in writing, to clean such places. This duty has been imposed by the Director of Health upon all sanitary inspectors in the city regardless of their special assignment and it is believed that results in the past two months have certainly warranted requiring a strict adherence to this rule.

"The city markets and city dumps are regularly inspected and suggestions made to those in charge with reference to the destruction of fly breeding places and adult flies by means of blue flame torches which are very effective. The city dumps are treated by the department of sanitation and transportation.

"Transportation is secured by the use of 4 carretelas, 1 carromata, and 1 handcart and is fairly adequate at least while the dry season lasts. It is believed, however, that in the rainy season 1 more carretela or 2 handcarts may be needed.

"SPECIAL DISTRICTS.

"Those districts which require special and frequent attention are Intramuros, Taft Avenue, the Pandacan dumps opposite Malacañang Palace, region around San Lazaro Hospital and St. Luke's Hospital, and the fishpond region of Tondo.

"PREVALENT MOSQUITOES.

"The malaria mosquito (*Myzomyia rossii*) is found in all esteros and in the fishponds of Tondo, but particularly in the esteros along Leveriza and Vito Cruz in Malate. The striped-bill mosquito (*Culex ludlowii*) is found in ditches, canals, and many of the esteros. The night mosquito (*Culex fatigans*) is confined almost entirely to Intramuros, but as it breeds

in vaults and covered drains (never in water exposed to the sun) it also occurs in other parts of the city.

"The cesspools, vaults, and open drains of the city have been systematically oiled since November with a consequent improvement which was to be expected.

"COMPLAINTS.

"Complaints are of two kinds, those made by and those made against householders. The former class has been found to be due to the presence of mosquitoes breeding on the premises and usually in the house of the complainant and in such cases a single notice has usually been sufficient to stop the nuisance, a check being held against the premises for subsequent infraction of the ordinance. In only one or two cases has it been necessary to complain against a first offender. People are given to understand that it is not the business of the authorities to keep mosquitoes from breeding on their premises, but rather to instruct them as to methods of extermination and warn them to comply with the law.

"MISCELLANEOUS.

"For several years the necessity of a tide gate at the bridge near Fort San Antonio Abad, on Calle Real, Malate, has been urged by me and by the chief of the mosquito brigade; but thus far we have failed to get the work done. Such a gate would mean the controlling of an area of nearly 5 square kilometers and the subsequent saving of several thousand pesos in petroleum.

"Petroleum is now used at the rate of ₱450 worth each month for all spraying against mosquitoes

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"FLY WORK.

"It is believed that more efficient service could be got in the fly extermination if an assistant sanitary inspector were detailed for this work exclusively and if the order to all inspectors to report such conditions to the chief of the mosquito brigade were reiterated from the Director's office."

* * * * *

"Very respectfully,

"CHARLES S. BANKS,

"Consulting Entomologist, City of Manila."

BOARD OF FOOD AND DRUG INSPECTION.

Regular meetings were held the second and fourth Fridays of each month. Five special meetings were called.

FOOD AND DRUGS ACT.

Local manufacturers of chocolate; coffee imitations, mixtures, or substitutes; and of jellies, pickles, etc., were required to change their labels so as to conform with the law. An appeal made by distillers was not sustained. Of 11 importations of foods and drugs against the rejection of which protest was made to the Board, 7 were permitted entry and 4 were denied.

Upon the recommendation of the Board through the Director of Health, a law was passed requiring all skimmed milk to be labeled "This is not suitable for feeding infants under one year of age," or with other equivalent words. As a further deterrent to its use, a tax of 20 centavos per kilo gross weight was imposed.

Of 20 trademarks reviewed prior to registration, 3 were reported as being not in accordance with law.

The sale of storage eggs, poorly packed tomatoes, and the addition of coloring matter to the same were considered. The matter of the sale of ice cream below standard is now pending.

By executive order the Board administered Act No. 2342 relative to formulas, advertising matter, etc. Labels, formulas, pamphlets, almanacs, and advertising matter pertaining to over 100 medicinal preparations have been passed upon. Newspapers were requested to submit advance proofs of advertisements. Four hundred advertisements were passed upon, of which 150 were disapproved. Numerous questions relative to the Act and regulations have been decided.

TENEMENT HOUSES AND OVERCROWDING.

One of the routine duties of the sanitary stations of the city of Manila is to make inspections relative to overcrowding, especially in small and badly constructed houses.

Besides the permits issued for tenement houses in previous years, four permits were issued during the year 1914 and one application was disapproved.

REMOVAL OF INSANITARY LIGHT-MATERIAL HOUSES.

Orders for the removal and transfer of insanitary nipa houses have been issued to all stations in the city of Manila, to the number of 20 since June 30, 1914, the majority of which were located in the district of Tondo. In this district 199 nipa houses on Santo Cristo street, near the sea, have been removed and their occupants induced to move to the Yangco sites and to Antonio Rivera Street, where they are now living in better sanitary conditions.

"CLEAN-UP" WEEK.

In accordance with the suggestion of the Director of Education, approved and recommended by this Bureau, the period December 14 to 20, 1914, was set aside to be observed by the people of the Islands as "clean-up week." It is understood that it is intended that "clean-up week" shall be an annual event. The value of this measure can be readily appreciated, as it will serve as a means of bringing the people together for a common purpose for their material benefit, will demonstrate to communities as a whole the difference between a clean and dirty town, and will tend to create what might be designated as "a sanitary habit." This Bureau coöperated by sending out instructions and circulars to the health stations of the city of Manila and to the district health officers of the various provinces, calling their attention to the necessity of rendering such assistance as might be possible and directing them to devote their attention particularly to the following points:

(a) *Drinking water.*—Instructions as to methods of purification, cleansing, and disinfection of containers such as cans, tanks, cisterns, or wells, and the manner of protecting and covering the same.

(b) Instructions as to the correction of insanitary conditions caused by the existence of pools of stagnant water, accumulations from rains or drainage, defective drains, dirty canals, empty cans, bottles, pieces of bamboo, etc., which might contain water and furnish breeding places for mosquitoes.

(c) Instructions as to disposal of garbage and waste or excrementitious matters, especially with reference to proper receptacles and covers for the same, their removal, and proper disposal.

(d) Instructions as to the cleaning of stables, corrals, cages, etc., intended for the use of animals, and the installation of proper drainage.

(e) Instructions as to simple methods for the cleansing of houses and yards, such as the cleaning of walls inside and out, the cleaning of cellars, storehouses, and similar places, with especial reference to saloons, tenement houses, hotels, restaurants, eating places, bakeries, shops, factories, and industrial establishments generally; special instruction to be given with reference to prohibition of spitting upon floors or walls; with reference to yards, advice relative to cutting of grass, removal of weeds and undergrowth, and as to the necessity for the prevention of soil pollution in such localities.

Upon the whole, in accordance with the reports received from the various medical officers in charge of sanitary stations or health districts, good results were obtained, especially in the cleaning up of vacant yards, in the removal of pools of stagnant water, the disposal of accumulated garbage and waste, and the installation of proper drainage canals where possible. Sanitary inspectors have been directed to note during inspections as to whether the work begun during "clean-up week" is being continued, and to insist that the good results obtained during "clean-up week" be carried on during the balance of the year.

OBSERVATIONS RELATIVE TO MORTALITY RATES IN MANILA.

There has been a general decrease in mortality in Manila, in spite of the fact that occasional fluctuations have occurred due to various causes. The tendency at present is to a further decline in mortality. To illustrate: The average death rate for the period covered by the years 1901 to 1905 was 44.83 per 1,000; in the next five-year period, from 1906 to 1910, inclusive, the rate declined to 38.34 per 1,000; and for the past four years, 1911 to 1914, inclusive, the average has been 29.23 per 1,000. These figures clearly demonstrate the value of modern sanitary methods in the reduction of mortality.

INFANT MORTALITY.

As a result of considerable study and efforts made to educate mothers in the care of children, some reduction in the mortality of children under 1 year of age has been obtained. The average during the five-year period 1905 to 1909, inclusive, was 45.24 per cent. In the following five-year period the average was 44.22 per cent. During the four years ended December 31, 1914, the average mortality was 34.37 per cent, a reduction of over 10 per cent as compared to 1905.

Among older children, from 1 to 5 years of age, the average reduction has not been so great. During the first five-year period it was 14.61 per cent; during the second, 13.14 per cent; and for the four-year period ended December 31, 1914, it was 13.47 per cent.

DECREASE IN THE NUMBER OF MOSQUITOES AND FLIES.

Through the earnest and effective work of the expert personnel in charge of the campaign against mosquitoes and flies in the city of Manila under the direction of this Bureau, the decrease in the number of these insects in very noticeable at present.

MISCELLANEOUS.

Bureau of Health exhibit at the Philippine Exposition.—The exhibition of the Bureau of Health at the Exposition of January and February, 1914, was of an educational nature and consisted of public lectures with cinematograph films, and distribution of health bulletins and pamphlets. The exhibit was prepared under the direction of Dr. John E. Snodgrass. The nature of the exhibits is shown in the following statement:

Models were exhibited showing rat guards on ships' hawsers, to prevent the entry and exit of rats from ships.

Dolls painted to represent a vaccinated baby and a baby covered with smallpox sores were shown.

Two model nipa houses with grounds, showing well-kept house and grounds and a neglected house and grounds. One model showed a well walled with stone and protected at the top from surface water; the other, an ordinary well with dirty walls, not protected from surface water.

Miniature soldiers, depleted ranks, showing percentage of deaths from wounds and from disease during war.

Sanitary and insanitary barrios.

Large model of sanitary house showing proper drainage, etc.

Rat-infested and rat-proof house.

Sanitary pail made from an empty petroleum can.

Polished and unpolished rice, giving statistics on beriberi from Government institutions.

Sanitary garbage can.

Model of strata, showing the cause of the flow of water in artesian wells.

An emergency hospital.

Modern hospital ambulance.

A cinematograph show presenting pictures from Culion leper colony, slides of bacteria, etc., with lecture by the Assistant Director of Health.

Six-foot models of flies, mosquitoes, bedbugs, fleas, cockroaches, and disinfecting pumps.

Pictures showing the various hospitals in the Islands, sanitary and insanitary markets, proper and improper manner of eating, and other educational themes.

A bulletin on flies and other Bureau of Health publications.

The exhibit was very successful and was complimented many times, particularly by His Excellency the Governor-General.

It is estimated that 10,000 visited the exhibit daily on an average.

District health officers, assembly.—The district health officers' assembly took place on February 2 and 16, 1914, as was announced in the last semestral report of the Bureau in 1913. The program was followed minutely, as published; the subjects presented and discussed in this assembly will probably be published in a separate volume as a means for diffusion of sanitary knowledge in the Islands. Twenty-four district health officers from the provinces, 8 municipal physicians from different municipalities in provinces near Manila, and the whole medical profession in the city of Manila attended the assembly.

The following is an extract of a set of resolutions adopted by the assembly of district health officers:

"1. That existing privies in provinces be modified. That the four models proposed by Dr. Vicente de Jesus and that proposed by Dr. M. M.

Gallardo be adopted in provinces through selection, according to the possibilities of the people.

"2. *Against malaria*.—Quinization in infected places. Compulsory use of mosquito net. Canalization and drainage. Petrolization.

"3. *Proposed amendments to Fajardo Act, 2156*.—Authority for the Director of Health to propose amendments to said Act, in case there is no other reorganizing the Bureau of Health.

"4. That a more imperative law than those existing at present with regard to birth and marriage registers, be enacted.

"5. *Urbanization*.—Canals and sewer systems for municipalities and provinces, upon study by the district engineer, or the sanitary engineer.

"6. To obtain from the Legislature a fund of not less than ₱1,000,000 for permanent health work in provinces and municipalities.

"7. That the declaration of typhoid fever be made compulsory in provinces and municipalities. That antityphoid vaccination be limited to contacts only."

Popular lectures with cinematograph films; Sanitary exhibition car.—The work of public lectures was started in June, 1914, through all the towns of Cavite Province, by Dr. Felino Simpao, with the necessary personnel as assistants.

After preliminary negotiations with the Manila Railroad Company, a special car, in which to place the sanitary exhibits, was loaned by the company. The installation of the sanitary exhibits of the Bureau and other exhibits connected with health and sanitation work generously contributed by commercial houses, was finished November 15, 1914, and the car started on its first trip with the best wishes of the Secretary of the Interior, many physicians, Bureau of Health employees, and a number of citizens who had assembled to speed the car on its mission for the public welfare.

The personnel assigned to duty in the car consists of a sanitary inspector, two machinists, and an assistant for night exhibits.

The exhibit consists of models of artesian wells; different systems of pails; two painted dolls—one vaccinated and well, the other unvaccinated and ill with small pox; milk sterilizer for infants' food; garbage receptacles; drinking-water containers; sanitary paper cups, paper plates, paper towels; models of bed with mosquito net; milk receptacles; a frame showing kinds of mosquitoes and flies; apparatus to catch these insects; samples of rice with its pericarp and without; a frame showing the danger of eating with the hands and on the floor; insanitary sites and sanitary barrios; privies in hygienic markets; plans of vaults; and other charts and plans which demonstrate the advantages of public and private hygiene.

The exhibit car with public lectures has already covered the Provinces of La Union, Pampanga, and Pangasinan, and at the close of the year is in Tarlac Province; the car will continue through all provinces having railroad lines.

Through official resolutions of the provincial boards and municipal councils where the car exhibit has been shown, it is noted that a great number of persons have attended the cinematograph exhibitions and lectures, particularly in the evenings; all who have seen it are enthusiastic in their praise and grateful to learn how living conditions can be improved.

Assistant sanitary inspector examinations.—For the purpose of bettering the standard of sanitary personnel, and in accordance with the provisions of paragraph 916 of the Sanitary Inspectors' Handbook, an examination for third-class assistant sanitary inspectors was held on December 7, 1914.

One hundred thirty-seven candidates took the examination of whom only 28 passed.

Appointment of Mr. A. P. Brown as temporary sanitary inspector with duties to inspect cigar and cigarette factories in Manila.—Upon the suggestion and with the consent of the Collector of Internal Revenue, Mr. A. P. Brown was appointed as temporary sanitary inspector in the Bureau of Health, assigned to Station A, Meisic, with the special duty of inspecting the different cigar and cigarette factories in the city.

Increase in price of food.—Owing to the European war, there was a marked tendency to increase of prices in articles of prime necessity, among them milk, which is the basis of the nourishment of patients and children. For this reason, and in compliance with the order of His Excellency the Governor-General, a sufficient quantity of milk was placed on sale in all sanitary stations in the city of Manila at a low price as an emergency measure; this was started on August 10 and continued until September 20, 1914, when the local price, having decreased to the Government price or less, the sale was discontinued.

Flood in the city of Manila.—During the great flood which occurred September 1 to 5, inclusive, in the city of Manila, coöperation was given by the sanitary stations in attending wounded and in furnishing medicines and treatment.

Authority given to the Colegio Médico-Farmacéutico de Filipinas for translating into Spanish the Sanitary Inspectors' Handbook.—In return for the translation into Spanish of the Sanitary Inspectors' Handbook, published by this Bureau, the Colegio Médico-Farmacéutico de Filipinas was authorized to print as many copies as they desired to sell at a reasonable price. Hundreds of copies of these handbooks were sold by this Bureau and many more by the Colegio Médico-Farmacéutico de Filipinas.

IWAHIG PENAL COLONY DIVISION.

During the year there were 32 deaths, 1 being from homicide and 1 accidental. The average death rate was 21.3 per 1,000 among a total of 1,408 colonists. Of deaths from disease, 19 were due to tuberculosis and 5 to malaria. There were 5 births among the families of employees and colonists. A new hospital building has been constructed which is larger and better than the former one.

THE PHILIPPINE GENERAL HOSPITAL.

The Philippine General Hospital has continued to fulfill its varied duties in a most creditable manner. During the four years the hospital has been in operation, hundreds of thousands of patients have been given efficient treatment.

However, several years of practical operation demonstrated that some changes in the buildings, equipment, organization, and personnel would be beneficial.

After thorough consideration of all criticism and suggestions the Secretary of the Interior authorized a reorganization which constituted the Philippine General Hospital as a division of the Bureau of Health, designating Dr. W. E. Musgrave, the Dean of the College of Medicine and Surgery, University of the Philippines, as chief of division, effective July 16, 1914.

The following general plan of reorganization was instituted which, with some minor exceptions, is in force at the close of the year.

Under it efficiency has increased, internal friction has been reduced to a minimum, and relations with the public, the press, and others interested seem improved.

ORGANIZATION.

The hospital now is organized under 17 departments, as follows:

- I. Financial. With a chief of department, who is accountant and disbursing officer of the hospital, cashier, record and property division.
- II. Engineer's department. With engineer as chief of the department and including mechanics, electricians, carpenters, plumbers, painters, etc.
- III. Information, transportation, and service department. With assistant superintendent, School of Nursing, chief of the department. This department has divisions of information, transportation, and service.
- IV. Private patient department. Including members of visiting staff, attending physician and surgeon to Government employees.
- V. Department of nursing. With the chief nurse as chief of the department, has divisions of nursing, subsistence, general house-keeping, linen, and laundry.
- VI. Department, School of Nursing. With the superintendent, School of Nursing, as chief of the department. Has its advisory board, faculty, assistant superintendents, and various teaching departments. A course in midwifery is a special department of this school.
- VII. Receiving department. Under the supervision of the executive officer, resident on duty, and other officers are constantly on duty in this department by daily detail. It handles the entire receiving and emergency service of the hospital.
- VIII. Department of pathology. Professor of pathology and chief of the department of the College of Medicine and Surgery is chief of the department. It handles the autopsies, surgical pathology, and pathological teaching of the hospital.
- IX. Pharmacy department. With the director of the School of Pharmacy, College of Medicine and Surgery, as chief of this department. The organization corresponds to that of the College of Medicine and Surgery.
- X. Department of physical therapy. Including all electrical work, mechanotherapy, etc. It is identical in organization with a similar division in the College of Medicine and Surgery.
- XI. Department of Medicine. The organization of this department is identical with that of the College of Medicine and Surgery. The clinical laboratory is a division of this department.
- XII. Department of surgery. The organization of this department is identical with that of the College of Medicine and Surgery.
- XIII. Department of ophthalmology, otology, laryngology, and rhinology. The organization is identical with that of the College of Medicine and Surgery.
- XIV. Department of obstetrics. The organization is similar to the department in the College of Medicine and Surgery.
- XV. Department of pediatrics. The organization is similar with that of the College of Medicine and Surgery.

- XVI. Free dispensary department. With the executive officer as chief of this department, which is made up of special clinics which are operated under the direction of the various other interested departments of the hospital.
- XVII. Public welfare department. This department is now undergoing the process of organization.

PERSONNEL.

Prof. Fernando Calderon, vice dean and chief of the department of obstetrics of the College of Medicine and Surgery, was appointed Assistant Director of the Hospital.

Dr. Antonio Vazquez, instructor in surgery of the College of Medicine and Surgery was appointed executive officer.

Doctor Woodbury resigned as superintendent and the position was abolished. The position of accountant and disbursing officer was created and by courtesy of the Insular Auditor, Mr. J. B. Greata of that Bureau was transferred to the hospital to fill this position.

A number of other changes also occurred in the personnel.

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PAY-PATIENT DEPARTMENT.

In reorganizing the hospital, one of the first actions was to discourage, and as soon as possible eliminate entirely, the so called "General hospital pay-patient" service, which has been a source of much complaint in the past.

Private pay patients.—In order to eliminate as far as possible the opportunities for complaints of discrimination against outside physicians, a pay-patient department was created, distinct in space, operating rooms, attendance, etc., from the free service of the institution.

It cost several thousand pesos to make changes necessary to bring this about. The ambulance entrance was removed from the north wing of the executive building and a new one built at the receiving department on the opposite side of the hospital.

The former ambulance entrance was converted into a private entrance for pay patients and the former receiving department was converted into reception room and private physicians' rest and consultation room with telephone, nursing, and messenger service.

A well-equipped private operating unit with sterilizing room, doctors' dressing room, operating room, and service complement was provided separate and distinct from the operating pavilions used for the educational and free services. Orders were issued that private physicians were to receive every courtesy and attention and that above all no discrimination was to be made between physicians. This plan seems to have been very successful.

The method of securing extra medicines ordered by private physicians for pay patients has been improved by a special arrangement for the pharmacist on duty to secure such medicine in the most expeditious manner possible. Formerly there was a great deal of complaint about food and food service from pay patients. The system was changed and although we get daily reports on the subject there has been but one complaint regarding food during the last five months. On the contrary, we have hundreds of complimentary written reports on file signed by patients themselves.

Through the special supervisors, information division, and otherwise, the hospital makes an effort to extend to all private physicians courtesies and assistance similar to what is given in other large hospitals.

Medical attendance for Government employees.—This is an extremely difficult duty to perform efficiently and to the satisfaction of all parties concerned.

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One of the first steps in the reorganization of the hospital was to completely change the method of handling this department. All of the offices were removed from the hospital building proper to well-equipped offices in the pharmacy building. Concentration of this service in one place, with its own nursing staff and specially designated physicians, in the same building where the prescriptions were filled has tended to eliminate criticism.

Instructions were given to all officers and employees that Government employees in applying for treatment were asking for what was their right under their agreement with the Government and that they must be given the same consideration and have the same courtesy extended to them that would be given to any private patient.

* * * * *

The popularity of the attending service to Government employees increased so rapidly that later it became necessary to enlarge the staff for the keeping of office hours. * * *

SCHOOL OF NURSING.

With the opening of the new midwifery courses in April, 1915, the Philippine General Hospital School of Nursing will be one of the largest institutions of its kind in the world.

The introduction of nursing education and the rapidity with which the profession has become one of the most active, influential, and important uplift movements, forms an exceedingly brilliant chapter in the current history of the country.

The reorganization of the school planned for the early months of 1915 with definite university connections, will place it upon a high educational plane and increase still further its usefulness to the Filipino people.

The rapid advance made by the school during the last few years has been due in a large measure to the efficiency, tact, and good sense of the superintendent. With an executive less able and earnest, the present standing and future prospects of the school would be less attractive.

By constantly emphasizing the educational and sociologic importance of the school and by coordinating its instructors with those of the College of Medicine and Surgery it has been practicable to insure a splendid course of instruction and to turn out large classes of well-prepared nurses.

The rapidity with which the school has developed and the difficulty in securing experienced sympathetic teaching supervisors from the United States has made it necessary to crowd teaching and supervising duties upon our own graduates in some instances perhaps earlier than was advisable.

On account of these unusual responsibilities in very young nurses, it has been necessary to do a considerable amount of shifting in order to find the most suitable persons for various special details.

However, in the large majority of instances the exacting duties of higher positions have been discharged efficiently and the increased respon-

sibility has developed some very fine characters among our young men and women.

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In making a summary of usefulness of nurses and pupil nurses in hospital work, it should be borne in mind that these young men and women come from the various provinces of the Islands as graduates of the intermediate grade in the public schools. Their physical development is not always of the best and their practical knowledge of people and of the world is limited. In most instances, they have not seen a hospital previously and know absolutely nothing of the requirements of the ultra democratic profession of nursing.

In spite of this the nursing profession has advanced in a most laudable manner.

Our administrators and legislators should not, for a moment, lose sight of the fact that the nursing work of the Philippine General Hospital, so far as it concerns the sociologic problems of the Philippine Islands, is a factor in the development of the people and appropriations should be made with the understanding that at least 75 per cent of the money should be a charge against education and 25 per cent against practical usefulness during the period of instruction.

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On account of the lack of proper buildings, the solution of the laundering problem was difficult, but has finally been solved in a fairly satisfactory manner.

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Subsistence division.—What is designated in most hospitals as the steward's department, is usually one of the sources of criticism and it has been so in the Philippine General Hospital.

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In order to introduce efficiency, economy, and harmony into this department it was necessary to make certain changes. * * * At present, patients, staff, and employees are better pleased with their food as is testified to by daily reports from every mess, and above all, a striking saving was secured, amounting in all to from ₱500 to ₱1,000 a month.

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Information, transportation, and service department.—* * * Shortly after the reorganization was begun, the assistant superintendent, School of Nursing, was given charge of the department. He has done a great deal of very hard and efficient work in bringing about systematic and satisfactory organization.

As a result of this organization, it has been possible to decrease the unskilled labor pay roll by some 14 names during the last five months.

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Telephone service.—With a more efficient telephone service, the work of this division has increased enormously from an average of some 250 to 300 calls a day to more than 500 calls a day.

Except for the issuing of some rules and regulations, very little change has been made in the former information service. This organization, as such, has been unsatisfactory, but it has been practically an impossibility to secure employees who could handle this desk efficiently and with sufficient tact and courtesy to prevent criticism of the hospital. There seems to be no remedy except to secure the best men available, to supervise them more closely, and reduce their responsibilities as much as possible.

The hospital grounds, which are in charge of the chief of this department, constitute an important problem. The grounds are well parked and provision made for their proper care for that part in front of the hospital. Around the sides and back of the institution, the grounds are very much as nature provided them, since we have been unable to secure sufficient funds to fill up the holes and park these grounds as should have been done long ago.

It is our desire as soon as improvements can be made, to convert these grounds into play yards for convalescent children and rest places for convalescent patients needing out-door air.

Engineering department.—About the 1st of August, a definite department of engineering was created and the former electrician and engineer placed in charge of the department. All the personnel and equipment properly belonging to such an important department were placed under his orders.

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THE STAFF AND PROFESSIONAL DEPARTMENT.

The great educational and free patient service of the hospital is combined with the teaching functions of the College of Medicine and Surgery with its Graduate School of Tropical Medicine and Public Health, School of Pharmacy, and Dental Department.

The organization of the professional departments of the hospital is practically identical with those of the college and the members of the faculty hold corresponding positions on the staff of the hospital.

This constitutes the ideal arrangement between medical college and hospital and is the one practiced in most efficient centers of medical education. As pointed out by Sir William Osler and other educators and practical hospital men, this arrangement works for the greatest advantage of patients as well as for medical students and nurses.

The whole effort in organization of faculty and staff for several years has had in view the carrying out of principles enunciated many years ago by Sir William Osler and approved by the late Doctor Freer to the effect that every man should discharge three functions—(1) Educational or teaching, (2) routine duties, (3) research.

* * * * *

Departments of medicine, surgery, pediatrics, obstetrics, ophthalmology, otology, laryngology, and rhinology.—These departments are well organized and doing very good work. Each of them, in addition to the hospital service, has charge of its own clinics in the free dispensary.

Clinical laboratory.—One of the improvements directed by the Secretary of the Interior as a result of his investigation of the hospital was the immediate transfer of the clinical laboratory in the hospital from the status of a branch laboratory of the Bureau of Science located in the hospital. This change was provided in order to do away with considerable red tape necessary in interbureau transactions and in order to facilitate work for the hospital and to furnish a laboratory training for young physicians and nurses.

On August 10, 1914, the method of this transfer was confirmed by the Secretary of the Interior.

This laboratory now is a division of the department of medicine. The three physicians constituting its staff have all been given teaching duties in the College of Medicine and Surgery and School of Nursing in addition to their routine duties in the hospital.

Receiving department.—With the reorganization, floor 7 of the hospital was converted into lecture rooms and receiving department, with four small receiving wards of two beds each. A new ambulance entrance was constructed at the end of this division in order that this disturbing element might be removed from the very heart of the hospital.

The receiving department was provided with a sufficient personnel of doctors, nurses, and employees, and, in general, its organization completed very similar to that existing in all modern up-to-date hospitals. It naturally has its own telephone service, ambulance call service, and signal service and is constantly in touch with all departments of the institution at all hours of the day and night.

The reorganization of this department has been a success from the first and with the close of the year it is working smoothly and efficiently.

Free dispensary department.—During the year, a large free dispensary addition to the pharmacy building, with ample space for waiting, examination, and clinic rooms for the various divisions of the department, was completed. This building was occupied in July and about the 1st of August the department was extensively reorganized.

The executive officer of the hospital was placed in charge of the department and the clinics were arranged to cover most appropriate hours and sufficiently personneled to handle, with reasonable promptness, all patients who apply.

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With the closing of the year it may be stated that the free dispensary department is well organized and is doing a splendid work. We hope during the coming year to increase its usefulness and efficiency by making more complete and careful records, giving more attention to individual patients, extending its clinics to include every possible phase of illness and social service work as well.

Pharmacy department.—* * * This has been and is a very large and exceedingly important department of the hospital and usually prepares and distributes in the neighborhood of 100,000 prescriptions a year and is one of the largest prescription pharmacies in the world.

Under the authority of the Secretary of the Interior, and, in conformity with his reorganization plans of the hospital this department was promptly combined with the School of Pharmacy of the College of Medicine and Surgery, and the director of that school and an assistant professor placed in charge of the department.

Without any particular increase in expenditures, this immediately gave the pharmacy an enormous advantage over any arrangement which could otherwise have been made. It made it possible to throw the weight of the influence and service of the whole School of Pharmacy, with all its teaching faculty, employees, and students into this pharmacy. In other words, the department of pharmacy of the Philippine General Hospital became the practical teaching department of the School of Pharmacy. Funds were provided and the space of the pharmacy very much enlarged, refurnished, and equipped and so divided as to make it systematically possible to handle the work of the department without friction and with a reasonable guaranty of safety in the handling of dangerous drugs.

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A stock room was constructed on the second floor of the pharmacy building, a system of accounting for property instituted, and a clerk placed in charge of this storeroom, the stock of drugs in the pharmacy proper being kept to a minimum at all times.

A number of changes were made in the personnel of the department, but complete efficiency could not be had on account of the lack of sufficient funds in the 1914 appropriation to secure the necessary help. Funds were provided for in the appropriation bill for 1915 and the estimate was approved by the Legislature in a manner sufficient to warrant the proper discharge of the duties of this department for the coming year.

With the close of the year, it may be said that this department is well organized and equipped, it discharges its duties efficiently although not quite up to the standard we expect it to reach in the course of the next few months.

It may be of interest to note that in spite of the considerable increase in the work of this department during the last five months of the fiscal year, the actual expenses of the department have been materially reduced during the same time. This has been due to better organization and the more careful and efficient accounting for Government property in the shape of drugs. * * *

FINANCIAL DEPARTMENT.

One of the first steps in the reorganization of the hospital was to create a financial department with the object of establishing a practical and efficient system of accounting; collecting and disbursing funds; care of property and supplies; figuring distribution of costs, etc.

The accountant and disbursing officer of the hospital was given a large measure of authority and responsibility in placing the finances of the hospital upon a sound basis and has discharged the duty with marked efficiency. Now, after many months of constant investigation and long hours of overtime work, it seems that about all the facts have been established and this report shows the first accurate trial balance that has ever been made in this hospital.

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Furthermore, upon the request of the Secretary of the Interior, the Insular Auditor set up a separate journal for the hospital and by thus establishing its own supplies' account and taking up thereon over \$30,000 of supplies actually on hand, but which had, officially, been expended, it has been possible to close the year without relief from the emergency board or special legislation, and, as shown in the report of the chief of the financial department, there is available for reversion to the Treasury \$43,326.38.

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After several months' work by more than one man and with the coöperation of the Auditor, Constabulary, and chief of police, we have been able to set the accounts receivable up on the books in a manner approved by the Auditor.

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The introduction of a modern system of receiving, issuing, and expending commissaries resulted, with the help of our dietitians, in an immediate saving of over \$750 in this department the first month.

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Economies that are consistent with good hospital administration are practiced in every possible way. Particular attention is given to preventing excessive breakage, waste, and loss of property. This is done by an efficient system of reports and issues of supplies and property.

The sewing class in the School of Nursing is applied to practical work

in the manufacture of uniforms, sheets, and pillowcases, and practically all other hospital linens are now purchased in bulk and manufactured here.

The engineering department is constantly occupied in repairing and painting furniture, apparatus, instruments, and other property when not busy with the large power, light, water, plumbing, and other services of the institution.

The pharmacy department is concerning itself more and more with manufacturing finished drugs from the crude products in utilizing, as far as possible, medicinal plants indigenous to the country. Extracts of orange, lemon, etc., used extensively in pharmacy and formerly purchased, are now manufactured from the orange and lemon peel from our own subsistence department. As soon as manufacturing machinery already ordered has been received, manufacturing pharmacy will be advanced very much at a very considerable saving to the institution while offering much needed educational opportunities for students.

Metal polish formerly constituted a considerable item of expense. A satisfactory formula has been devised by the pharmacy department and the finished product is now manufactured at a saving of about 90 per cent on this item of cost.

The above represent only a few of the practical economies that have been made. Others are mentioned under appropriate departments.

All officers and employees are encouraged to make suggestions looking to increased efficiency or practical economy. Many such suggestions are constantly being adopted and the author given merit credit for the same.

In order to encourage and develop this spirit of coöperation to the highest extent, we are planning a carefully outlined efficiency record system with a view to establishing an efficiency medal which will be publicly awarded or changed monthly and which may be worn by the recipient for one month.

Our policy does not recognize perfection in efficiency or practical economy, but the stand is taken that the best possible standard of to-day is susceptible of further improvement.

PROFESSIONAL WORK OF THE HOSPITAL.

The professional work of the hospital is shown in detail in the report of the clerical and record division.

There were 7,193 patients treated in the hospital during the year. The total births were 622; total deaths, 530. There were 93,879 hospital days.

The free dispensary service, during the same period of time, handled 60,075 patients and the receiving service (including attending physicians' and surgeons' offices) handled 21,174 patients, or a total in all services and departments of 175,728 "patient visits" for the year, or an average of nearly 600 "patient visits" for each working day of the year. This constitutes a very large service.

By nationality, there were 732 Americans, 6,125 Filipinos, and 336 of other nationalities.

The clinical laboratory made 7,313 examinations and there were 958 major operations, or an average of a little over 3 for each working day of the year; 2,789 minor operations and 57,241 minor accidents, cleaning, and dressings performed.

General anesthesia was given to 1,345 patients and local anesthesia 826 times.

There were 3,002 ambulance calls and most of the patients in this service

were transferred to the Philippine General Hospital, at least for temporary care.

The physical therapy department made 532 X-ray pictures and gave 622 other forms of electric diagnosis or treatment.

There were 623 babies born in the hospital and 637 maternity cases handled by the out-patient service of the hospital, city of Manila, and Medical School. This service also made 3,451 out visits.

Examination of the above statistics shows a volume of work that would tax the abilities of any staff or any organization. It is difficult for the layman to realize what a service of this size means. It must be remembered that the number of persons handled is almost equal to the entire population of the city of Manila, that these patients were all sick persons, that practically every class of illness known to mankind is represented in the group, and that the work performed is all of very high tension calling for constant concentration and effort.

A further idea of the character of this work is obtained by examination of the table of diseases shown elsewhere in this report.

Brief discussion of this table shows that we treated during the year 280 cases of typhoid fever, of whom 65 died; 243 cases of malaria with 17 deaths; while 2 cases of smallpox, 5 cases of measles, 13 cases of whooping cough, 6 cases of diphtheria, 9 cases of Asiatic cholera, 2 cases of plague, 4 cases of leprosy, 5 cases of erysipelas, 1 case of glanders, 3 cases of hydrophobia and 11 cases of tetanus were admitted and transferred to the Hospital for Infectious Diseases. Eight hundred and sixty-five cases of dysentery were treated in the hospital of which 749 were of the amœbic variety.

Other interesting infectious diseases, in considerable numbers, were dengue fever, yaws, and septic infections.

Tuberculosis constituted the largest item for any single disease of which there were 881 cases. This in spite of the fact that clear uncomplicated tuberculosis is not treated in the hospital and only such patients were received as had complications warranting an effort to do something for them in this institution.

Four hundred and nine cases of syphilis were treated in the institution, the tertiary type and so-called para-syphilitic lesions constituting a large percentage.

Of gonococcus infection, including ordinary gonorrhea, there were 192 cases.

As a matter of interest particularly to the lay public, there were 179 cases of appendicitis treated during the year.

SOME IMPORTANT PROBLEMS.

Space.—Following out the reorganization lines indicated by the Secretary of the Interior at the time of his investigation of the hospital, an extensive reassignment has been made of the space in the hospital.

The entire space of the hospital has been reorganized so as to give the greatest comfort and efficiency in the discharge of all duties pertaining to the operation of the institution.

A sub post office known as Manila Station No. 18 has been established in what was formerly one of the record offices of the hospital just to the left of the lobby and main entrance.

The laboratory has been very much enlarged and modern standard equipment for it has been ordered and should arrive in the early part of the coming year.

Dormitory space.—Dormitory space provided for the institution always has been inadequate for its needs. Physicians, nurses, and pupils have all been overcrowded and extra expense has been incurred in order to make the necessary distribution of food and supplies.

The completion of the free dispensary building with dormitory space for 30 interns and resident relieved in a satisfactory manner congestion in the staff dormitory.

Nurses' dormitories have been so overcrowded as to be considered dangerous to health. This matter was brought to the attention of the Honorable the Secretary of the Interior, who very promptly authorized the securing of additional dormitory space. One of the buildings of the old Mercado Dormitory, formerly occupied by the Bureau of Education on Calle A. Flores, was rented and this building is now occupied by the young male nurses and pupils of the Training School.

There was, of course, a slight increase in the expense of operating the plant, due to renting this additional building and the establishment of another mess, but the comfort and the satisfaction to the employees brought about by this move, more than justify this additional expense.

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New construction.—A new free dispensary building costing about ₱90,000 was completed and occupied. This building has a large open-air waiting room capable of seating over 500 people with office space for clerks and records. There are 11 well-arranged and fairly well-equipped clinic rooms.

This building has proved very satisfactory in design and construction and relieves the terrible congestion which formerly existed in the overcrowded quarters in the old pharmacy building.

A large extension to the main kitchen of the hospital is under construction and has almost been finished with the close of the fiscal year. This extension provides for much needed additional space in the subsistence department and is arranged to accommodate the classes in dietetics. It is provided with a modern commissary department, cold storage vaults, butchershop, vegetable shop, dishwashing room, and bakery. The construction work was performed by the Bureau of Public Works and has been executed in a very satisfactory manner.

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Signal systems.—The various signal systems of the hospital including those of patients, physicians, ambulance service, etc., were of an obsolete pattern when they were installed and the method of installation was faulty.

Inefficiency in this service always has been one of the constant sources of criticism by patients and outside persons and the staff.

Official communications and recommendations, including those of two Governors-General who were patients in the hospital, have been to remove the present systems and the installation of a modern and efficient one. At one time, arrangements were about perfected whereby the Bureau of Public Works was to make this change under an appropriation of ₱14,000, the estimated cost for the work, but for some reason or another, the work was not carried out.

The inefficiency of this system has been responsible not only for annoyances to patients and officers of the hospital, but may be directly charged with the responsibility for serious accidents that have happened in the institution. To continue this service in effect is a serious reflection upon the institution and a constant source of danger and criticism by any person familiar with the operation of a "modern hospital."

RECREATION, AMUSEMENTS, AND ATHLETICS.

Recreation, amusements, athletics, and social life in general forms an important part of the instruction of nurses and other students. It has not always been easy to carry out plans for this part of our work. Dormitory, athletic, and other rules and regulations are criticized by some well-meaning persons as being too strict and by others as being too lenient.

The rapid changes in the social customs of the country during the last few years, make a wise decision as to rules governing social life in a coeducational institution very difficult.

It is inevitable that whatever attitude is assumed that criticism will continue and it only remains to use the best judgment possible and try to reduce criticism to a minimum.

SYSTEM REPORTS AND RECORDS.

On account of the great variety of activities carried on in a general hospital, a larger number and greater variety of reports are necessary than are required in other institutions. Some hospitals the size of this one have as many as three hundred different blank forms. Of course, if only the necessities, as viewed from an administrative standpoint is concerned, the number and character of reports and records may be very much simplified. However, it is important in this class of work to remember that the introduction of system reports and records is not only for the purpose of recording information, but it is for the purpose of teaching supervisors, nurses, physicians, and others system and order in expressing their ideas and views and in teaching them accuracy in observation.

We have during the last six months instituted in the hospital a rather extensive series of reports and record blanks. This was done with the above idea of benefiting the nurses and the students more than for the value to the administration of the reports themselves.

PLANS FOR 1915.

We believe that with the present organization we have a good hospital operating on a system that is practicable enough to insure efficiency. We expect to continue to develop the details of this organization and to improve it whenever possible. We feel that the work of the Philippine General Hospital in its relief of suffering; its educational influence upon doctors, medical students, pharmacists, dentists, nurses, and others is one of the most important in which any Government can be engaged, and, therefore, it is our aim to increase, at all times, both the volume and the quality of the work performed.

Recommendations.—Greater accommodations in dormitory space for nurses are necessary.

Property storerooms and other accessory buildings for the hospital are very badly needed.

The hospital is badly in need of a pavilion to care for delirious, infectious, noisy, and other classes of patients who should be kept apart from those who require absolute quiet and rest.

Repeated requests for a new nurses' dormitory to accommodate 250 nurses have been made. Such a building to be built as an extension to the present Taft Avenue home at a cost of ₱250,000 was requested this year but not allowed by the Legislature.

We need funds for the establishment and maintenance of a public welfare

and social service department so that we can relieve our congested wards of convalescent patients and have a follow-up visiting service by nurses and doctors to care for those people in their homes.

We believe that the integrity and future progress and usefulness of this hospital and its relief to suffering people, is intimately bound up with a greater and more important function of practical and didactic education along lines calculated to improve the social and industrial condition, personal and public hygiene and sanitation. (To this end, it is our intention to take advantage of every opportunity to tie the hospital and its dispensary, its School of Nursing, School of Midwifery, School of Medicine, Graduate School of Tropical Medicine and Public Health, School of Pharmacy, School of Dentistry and all other activities about this center, so tightly together that it will be impossible to distinguish between the various units.)

The great body of officers, including chiefs of departments, supervisors, physicians, nurses and others have shown a willingness and enthusiasm in their work and a support and belief in the institution, which has been a large factor in making whatever success has been accomplished during the past year.

PRISON SANITATION DIVISION.

MORTALITY.

Our report shows a general death rate of 19.35 per 1,000 per annum, of which 10.86 represent deaths due to tuberculosis and 8.49 the deaths due to nontubercular causes.

This as against a general death rate of 29.88 per 1,000 per annum for the fiscal year ending June 30, 1913, of which 22.88 per 1,000 per annum represent the deaths from tuberculosis and 7.00 the deaths from nontubercular causes.

During the year a total of 66 deaths occurred from diseases affecting the respiratory tract (including pulmonary tuberculosis), representing a death rate of 13.03 per 1,000 per annum from respiratory diseases; and 32 deaths, or 6.32 per 1,000 per annum, from other than respiratory diseases.

BIRTHS.

Eight births occurred in the prison hospital during the year among women pregnant at the time of commitment to prison. It would seem that other disposition than sending them to Bilibid Prison might be made of pregnant women guilty of minor offenses.

MORBIDITY.

The chief causes of sickness among the prisoners during the past year have been cholera, filaria, tuberculosis, venereal diseases (contracted outside of prison), drug habits, hemorrhoids, respiratory diseases, intestinal parasites, and dysentery.

BUBONIC PLAGUE.

Though there has been considerable plague in the city of Manila during the past year, no cases occurred in Bilibid. This is due largely to the fact that all of our buildings where prisoners are confined have been rendered rat proof so that the rats can find no place in which to build their nests. The administration building has been recently provided with a concrete floor throughout. The large prison storeroom has also been provided with a concrete floor. The dormitories, workshops, hospital, kitchen, etc., are all rat proof.

FILARIA.

During the year 6,180 blood examinations for filaria have been made. Of this number 2,078 were reexaminations of prisoners in Bilibid, 5 of whom were found to be positive; 631 had returned from Corregidor, Iwahig, and other stations, of whom 4 were found positive; the remainder, 3,471, were new arrivals, of whom 195 (5.6 per cent) were found to be infected with filaria. All filaria cases are segregated in a brigade by themselves and required to sleep under mosquito nets at night. Known filaria cases are not transferred to Corregidor or Iwahig.

CHOLERA.

During the flood which occurred early in September, the water stood to the depth of 3 or 4 feet inside the prison walls. Many of the prisoners availed themselves of this opportunity to enjoy a bath in the "pure" water. This water was contaminated by infectious matter from the nearby estero and by seepage from the lands adjacent to the prison, which had recently been filled in with garbage collected from all over the city. The first cases of cholera occurred three or four days after the flood, and during the remainder of the month of September 29 cases and 98 carriers; October, 13 cases and 24 carriers; November, 12 carriers; and December 45 carriers were discovered, making a total of 42 cases and 179 carriers. Out of these 42 cases, 6 deaths occurred, 3 of the deaths in San Lazaro Hospital. Out of the 179 carriers, 5 developed well-defined symptoms of cholera in from four to eighteen days after having been found positive as carriers. During the months of September, October, November, and December 61,000 stool cultures for cholera were taken. On Thanksgiving Day fresh bananas were distributed to the prisoners. This was the only uncooked food that had been permitted since the cholera appeared early in September; no carriers or cases had been found from November 2 until Thanksgiving Day. Four days later 11 carriers were reported by the Bureau of Science and on December 1, 20 more.

BERIBERI.

Five cases of beriberi are reported for the year; of these, 1 developed in Bilibid and 4 were imported. The case which developed in Bilibid occurred in a death-sentence prisoner who did no work, was kept in rather close confinement in one of the cell houses and limited to the cell-house yard for exercise. He received the ordinary prison ration as supplied other prisoners.

Reference to the annual report of 1906 shows 79 cases of beriberi during that year. The prophylactic measures carried out against beriberi have been the issue of a well-balanced ration, each prisoner receiving a ration containing from 2,250 to 2,500 calories per day; good sanitation throughout the prison—a good sewerage system; the prompt removal and disposal of garbage and rubbish; dry and well-ventilated sleeping and working quarters, together with well-regulated exercise and a moderate amount of labor.

TUBERCULOSIS.

Tuberculosis, as in previous years, continues to be the prime cause of morbidity and mortality in Bilibid. Out of the total of 98 deaths from all causes during the past year, 55 were due to tuberculosis. The chief measures taken to prevent the spread of tuberculosis have been the hospitalization of known cases; the utilization of cuspidors throughout the

prison; the prohibition of spitting about the grounds, workshops, etc.; and the prevention of dust in the prison yards by covering the surface of the ground with a fine gravel and frequent sprinkling with water.

Several months ago the writer was directed to proceed to Iwahig penal colony to investigate and report upon a suitable site for a tuberculosis colony. A site was selected apart from, but sufficiently near, the main central colony at Iwahig, that it might be under the administration of the colony officials. Something like 63 tubercular cases were transferred to the colony last May. As there are many other cases of tuberculosis in the hospital at present, I would recommend their transfer to the colony, as those now there are in much better condition of health than they would have been had they remained in Bilibid.

CONTAGIOUS DISEASES.

The report for this year shows a total of 69 cases (exclusive of cholera) as against a total of 219 cases treated during the year 1912. The diseases included are varioloid, varicella, parotitis, and measles. During the past year measles and varicella have been eliminated, no cases having occurred during the entire year; 19 cases of parotitis and 50 cases of varioloid occurred. The prophylactic measures employed against contagious diseases are the eradication of vermin and the prompt segregation of all acutely ill prisoners. Any prisoner developing fever, headache, or other symptoms of sickness is immediately sent to the observation ward where he remains until his case has been diagnosed or until he is considered safe to mingle with other prisoners. In addition to the routine disinfection of brigades, workshops, beds, clothing, etc., all quarters are immediately disinfected upon the discovery of cases of contagious diseases.

Though more than 28,000 vaccinations were performed in Bilibid during the past year, we have not been able to eliminate varioloid from among the prisoners.

Much has been accomplished in limiting the spread of contagion by enlisting the aid of the prisoner squad foremen throughout the prison. These men have been called to the hospital, the nature of infection explained to them, and their coöperation secured, in that acute contagious cases have been more promptly reported and as a result removed from workshops and dormitories before they had time to spread the contagion among their fellow prisoners.

PROPERTY DIVISION.

Requisitions filled:	
General	553
For supplies to be sold.....	147
Requisitions on Bureau of Supply.....	272
Requisitions on Bureau of Printing.....	160
Requisitions for commissary supplies.....	53
	<hr/>
	1,185

VACCINE REPORT.

On hand January 1, 1914.....	29,500
Received during the year.....	2,577,400
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Total	2,606,900
Issued during the year.....	2,589,350
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Remaining on hand December 31, 1914.....	17,550

SIMPLE REMEDY PACKAGES.

	No. 1.	No. 2.	No. 3.
On hand Jan. 1, 1914	34	18	2
Manufactured during the year	120	105	40
Total	154	123	42
Issued during the year	142	113	36
Remaining on hand Dec. 31, 1914	12	10	6

SANITARY ENGINEERING DIVISION.

The year 1914 was one in which were reaped the advantages accruing from previous years of efforts made for adequate ordinances. Public opinion also, as a result of continuous demonstration and educational work, now seems to favor the work of the division. The Municipal Board of the city of Manila, both collectively and individually as members, has assisted the office in many ways in confirming administrative action taken and in preparing and enacting sanitary ordinances. Similar coöperation has been secured, in a general way, from provincial officials, and it is therefore believed that future work will proceed smoothly and without organized opposition.

IN MANILA.

The enactment of a rat-proofing ordinance on June 25, 1914, has been of material benefit in building construction operations. No hollow partitions, walls, or ceilings are now permitted in frame buildings. These hollows were inaccessible and a favorite nesting place for plague transmitting rodents.

Sidewalk construction as a prerequisite to the construction of new buildings as per opinion of Member Arcadio Arellano and the Municipal Board of February 26, 1914, has greatly improved street conditions in front of new buildings and will in the future prevent accumulations of filth and rubbish in front of otherwise sanitary houses.

During the year 993 sanitary orders were issued. In addition, building projects to the number of 2,120 were acted upon, and 572 premises were connected to the sanitary sewer. Detailed tabulations are appended.

PROVINCIAL.

In the provinces the following were some of the principal projects handled:

1. The establishment of a sanitary pail system at Antipolo.
2. Investigations and plans for the establishment of hospitals for the insane at Alabang.
3. Design of a bottle-washing establishment at Sibul Springs.
4. Design and construction of additional buildings at Culion for the housing of negative lepers.
5. Survey and construction of wagon roads at the Culion leper colony.
6. Investigations for suppression of cholera in Bulacan Province.

SAN LAZARO HOSPITALS DIVISION.

This division includes the departments for insane and lepers; for all dangerous communicable diseases, including advanced tuberculosis; the morgue, crematory and steam laundry; and the free dispensary.

The department for insane has about 300 inmates, 50 being in the women's ward.

The principal causes of admission have been manic-depressive insanity, melancholia-mania, terminal dementia, senile dementia, dementia-praecox, alcoholic insanity, paretic dementia, epileptic insanity, and insanity due to infections.

The most of the readmissions at this institution are due to alcoholism and manic-depressive insanity.

The majority of the cases discharged cured or improved are of the manic-depressive and melancholia-mania types and alcoholics.

The most frequent causes of death were terminal dementia and pulmonary tuberculosis.

As many patients as possible are employed in gardening or other work; an appropriation has been made for an industrial teacher, and this work will be carried on during the year as heretofore, except that the teacher can now give her full time to the work.

The patients have considerable amusement and recreation playing various games in the yards, swinging, using the punching bag, etc. A phonograph gives them concerts from time to time. An effort is made to mark all holidays by suspension of work, extra food, etc.

No patient is allowed in any way at this institution, all having as much as they can eat; of late, a light lunch has been furnished the insane at about 8 or 9 o'clock in the evening.

The treatment is in general, of course, symptomatic; there is hot and cold water for baths, both for cleansing and therapeutic purposes. Antisyphilitic treatment has been used in some appropriate cases with varying results. For alcoholism and drug addiction the belladonna-hyoscyamus treatment, with elimination by purgation, has been used.

The number discharged cured or improved compares favorably, it is thought, with other hospitals for the insane. While the undersigned was on leave in the United States an inspection was made of the institutions for the insane at Buffalo, Binghamton, and Willard, three of the largest asylums in New York State. So far as was observed, we seem to be working along about the same lines here in matters of care, diagnosis, treatment, classification, and cure of the insane.

This institution is a regularly constituted asylum for criminal insane and there are over 100 at present confined here. Of these, about 70 have been guilty of some form of homicide and over 20 of attempted homicide; 12 have been convicted of some form of robbery, and 5 of arson, 1 of adultery, and 1 of rape.

The leper department contains from 50 to 200 or more inmates, depending on circumstances. The men and women are strictly separated; and there is a separate wing with two large rooms, closets, and baths, and outside staircase for the isolation of those who have, apparently at least, become free from leprosy.

The leper suspects are kept in a nipa house in the rear of the leper department for observation.

Quite a large number of cases are being treated with chaulmoogra oil, with considerable improvement in many instances.

All cases coming to this department are examined repeatedly, of course, clinically and microscopically, and no patient is held permanently or sent to Culion unless the bacillus of leprosy is demonstrated.

The patients in this department have a large yard sufficient for recreation and exercise, and are usually quite contented. There are a couple

of phonographs and other musical instruments for use here, and games and plenty of reading material.

In the department for dangerous communicable diseases the following have been received: Cholera, bubonic plague, varioloid, diphtheria, measles, whooping cough, mumps, erysipelas, glanders, tetanus, suspected scarlatina, advanced tuberculosis, and others.

This department contains from about 50 or 75 patients up to several hundred, depending on the presence or absence of epidemics. At one time during the past year there were about 200 inmates in the cholera ward alone, including "carriers," but at present there are almost none.

The results obtained from the treatment of cholera during the last little epidemic were quite satisfactory, the mortality for those receiving medical attention being about 28 per cent. The treatment consisted, as usual, of intravenous injections of salt solution, stimulation, and heat, etc. Proctoclysis was used to a considerable extent with good results apparently.

In treating plague, the serum is invariably used, but with indefinite results, as a rule. There has been no plague in Manila since the first part of September.

It is thought that diphtheria cases are being brought to the hospital somewhat earlier than formerly; the result of serum treatment depends very largely, of course, on early use.

During the last part of the year a case of diphtheria was found in a person having some connection with the Bureau of Printing, and from this case about 25 "carriers" were admitted.

Tetanus has been treated with very large doses of serum given after approved methods, but frequently with little result in severe cases.

There are usually about 40 patients in the ward for advanced tuberculosis; no case is refused admission. At the time of the cholera outbreak the male tuberculosis cases were transferred temporarily to the San Juan del Monte Hospital, in order to furnish more room for cholera, but all have been returned to this hospital.

All cases of cholera and plague and many others have been autopsied at the San Lazaro Morgue. There are now two autopsy tables, one having been put in during the past year.

In the crematory about 25 or 30 bodies are usually burned during the year, consisting of Americans, Japanese, and East Indians.

The combined disinfecting plant and steam laundry is a most important part of this institution. It would, indeed, be almost impossible to run the place properly and safely without it.

SOUTHERN ISLANDS HOSPITAL DIVISION.

PREVALENCE OF DISEASES, ETC.

In the table of diseases appended to this report it will be found that there is a prevalence of malarial fever, beriberi, and intestinal parasites. These have appeared almost entirely in laborers and their families who, having been employed upon railroad construction work in the Province of Tayabas, return to their native Province of Cebu and within a few days are admitted to the hospital. The clinic in eye, ear, nose, and throat has been well attended, and under the chief of this clinic a large amount of work has been performed. Although not availed of to a very large extent, indigent cases were granted the privilege of having the expense of their transportation paid from funds of the Bureau of Health when such cases in the municipalities of this province could be benefited by operation or other treatment.

GOTA DE LECHE WORK.

Although the Gota de Leche, with the district nurses in charge, is an entity practically separate and distinct from the Southern Islands Hospital, the latter institution is used as a base of supply and disbursement; all supplies being purchased, rentals paid, etc., by the superintendent of the hospital. This enterprise is directly under the supervision and control of the district health officer and furnishes much clinical material for the hospital wards.

BUILDINGS.

There is urgent need of a new dispensary building and the work indicated in the accompanying tables is sufficient evidence of this necessity. The dispensary building should contain quarters for two or more internes, an office and receiving room, and an ample pharmacy (so that the latter may be removed from the main building and thus give more office space), in addition to a dressing room for surgical cases, and such other accommodation as the experience of the Director of Health may indicate.

PHYSICAL EXAMINATIONS.

The medical examination required for the Philippine civil service, Philippine Training School for Nurses, and motor-vehicle drivers is conducted by the Bureau of Health at Station J, Intramuros.

The following table shows the number of persons examined:

	Passed.	Rejected.	Total.
First-class patrolman.....	8	2	10
Third-class patrolman.....	259	81	340
First-class fireman.....	5		5
Second-class fireman.....	124	15	139
Clerk.....	232	2	234
Machinist.....	4		4
Junior surveyor.....	30		30
Messenger.....	18		18
Second-grade apprentice.....	55	7	62
Second-grade examination.....	21		21
Third-grade examination.....	4		4
First-class prison guard.....	7		7
Second-class prison guard.....	75	10	85
Motor driver.....	454	9	463
Junior draftsman.....	6		6
Computer.....	3		3
Junior bookkeeper.....	1		1
Customs guard.....	6		6
Veterinarian.....	1		1
Nurse.....	5		5
Nautical examination.....	29		29
Wireman.....	3		3
Total.....	1,350	126	1,476

BOARD OF PHARMACEUTICAL EXAMINERS.

The Board held an examination beginning January 6, 1914, at which 42 applicants presented themselves, 5 of whom received certificates, and a second examination beginning July 7, 1914, of 48 applicants, of whom 23 passed, a total of 28 applicants approved.

During the year 38 certificates as apprentice pharmacists were issued, one certificate as practicing pharmacist without examination, in accordance with Act No. 2382, and one certificate as Chinese pharmacist.

Total receipts, ₱2,776. Fees to members, ₱720. Fees to the secretary-treasurer, ₱300.

BOARD OF MEDICAL EXAMINERS.

The secretary reports the following registrations during the past year: Doctors of medicine, 17, 10 without examination; graduates of the University of the Philippines; licentiates in medicine, 36; cirujanos ministrantes, 7.

BOARD OF DENTAL EXAMINERS.

This Board has held two examinations during 1914, at which a total of 49 applicants were examined, of whom 22 passed.

Dental clinics have been held with the results shown in a table elsewhere in this report.

The receipts from these examination fees amounted to ₱510.

PHILIPPINE ISLANDS ANTITUBERCULOSIS SOCIETY.

A brief summary of this organization's work in Manila is given below.

I. SANATORIUM.

1. Admissions during the year.....	215
2. Patients previously admitted.....	34
3. Total number of 1 and 2.....	249
4. Discharged during the year.....	195
(a) Apparently cured	39
(b) Arrested	38
(c) No change	93
(d) Died	*15
(e) Other causes	10

II. DISPENSARIES.

(a) Patients attended at the dispensaries.....	3,576
(b) Patients improved ^b	17
(c) Patients visited at their homes by the visiting nurses.....	760
(d) Patients visited at their homes by the visiting physician.....	89
(e) Patients sent to San Lazaro Hospital.....	56
(f) Patients died; attended by visiting physician.....	46

* Of the 15 cases of death, 12 belong to San Lazaro Hospital, transferred to San Juan del Monte Tuberculosis Hospital and Sanatorium, during the cholera epidemic.

^b Most of the improved do not return to the dispensaries, and therefore are not properly recorded.

**EXTRACTS FROM ANNUAL REPORTS OF
DISTRICT HEALTH OFFICERS.**



EXTRACTS FROM ANNUAL REPORTS OF DISTRICT HEALTH OFFICERS.

AGUSAN.

One case of smallpox which proved fatal occurred in a man who had never been vaccinated.

Nineteen cases of yaws have been treated successfully with neosalvarsan.

Three cases of elephantiasis treated with neosalvarsan have shown no improvement.

ALBAY.

Sanitary districts.—All the municipalities except two are organized into health districts.

Dispensaries.—Each municipality conducts a dispensary for the poor and emergency cases.

Water supply.—Four artesian wells were opened successfully during this year.

Epidemics.—Bacillary dysentery became epidemic in the municipality of Albay and was gotten under control by efficient prophylactic measures. There were 25 cases with 5 deaths.

New markets.—Five new sanitary markets were constructed.

Examination of school children.—Of the 8,687 school children examined the results were as follows:

	Per cent.
Dental caries	8.33
Tuberculosis .....	.13
Skin diseases, various.....	1.80
Adenoids or hypertrophied tonsils.....	1.30

Rabies.—There were 8 deaths during the past year from rabies. Only 2 received preventive treatment, as the first notice the Bureau of Health representative usually had was the receipt of the death certificate.

Visiting nurses.—The 3 visiting nurses authorized by the provincial board have done very efficient work during the past year.

"Clean-up week" was a great success.

AMBOS CAMARINES.

Barring a slight outbreak of dysentery in Lupi and measles in Naga, Camaligan, and Nabua, the public health has been excellent. The death rate during the first, second, and third quarters was, respectively, 18.96, 17.84, and 22.01. The birth rate for the same periods was, respectively, 50.19, 47.45, and 43.86.

The sanitary force for the year 1915 will be increased by the addition of 3 sanitary inspectors, with functions of presidente de sanidad, 1 at each of the following points: Libmanan, Magarao, and Indan.

A private residence of 14 rooms in a central location was bought for ₱9,000 and remodeled at a cost of ₱1,000. This building now provides

quarters for a hospital of 15 beds, a dispensary, and offices for the district health officer. Two buildings in the rear of the house are used as provincial storehouses. The hospital opened October 1, 1914. During October, November, and December 2,050 cases were treated at the dispensary and 15 cases admitted to the hospital. The personnel consists of 2 nurses, 2 practantes, and 4 servants.

ANTIQUE.

For the past twelve months the sanitary condition of the province has been excellent.

Malaria.—Malaria has caused fewer deaths than in previous years.

Popular conferences.—Popular lectures are greatly needed in order to enlighten the public in regard to the benefits to be derived from the work of sanitation and hygiene. Public lectures have been given by health officers during the past year, while the sanitary inspectors are also of assistance in this matter.

Vaccination.—General vaccination was completed by the end of March.

BENGUET.

Baguio is now provided with a new sanitary sewer system as well as a pail and garbage collection system. As a result of these measures very few cases of dysentery have occurred during the past year. There were 9 cases of typhoid fever.

A sanitary inspector has supervised the sanitation of the labor camps of the Manila Railway Company. With the hearty coöperation of the engineer in charge, efficient preventive work has been done and very little sickness has occurred.

Camp sanitation among the laborers on the Naguilian Trail has also been effective.

In the Pugo district, Father Beurme, a Belgian priest, has given valuable assistance in improving sanitary conditions and in alleviating sickness among the people.

Quinine is kept for sale to the poor by the deputy treasurers in all the provincial towns.

BATANGAS.

In general, health conditions have been satisfactory. Tuberculosis and malaria have been the chief preventable causes of mortality. The sanitary forces of the province have been increased by the appointment of a provincial sanitary inspector at a salary of ₱40 per month.

Clean-up week.—Due to the appearance of cholera, the municipalities appointed municipal sanitary inspectors and these continued their services through clean-up week.

The provincial board authorized the printing and distribution of 10,000 copies of Circular No. 60 translated into Tagalog.

Appropriation has been made for the provision of a waterworks system for the provincial building, the high school, jail, and the building for the insane, together with modern flush closets for the provincial building.

Insane.—Thirteen insane persons are in the provincial jail. Quarters and hygienic conditions are fair.

BOHOL.

Clean-up week was the cause of great improvement in sanitary conditions throughout the province.

The examination of school children has been carried on by Bureau of Health representatives and over 20,000 children were examined. Many were in need of attention, the majority of whom were treated in the free dispensaries.

BULACAN.

Markets.—Of the 19 municipalities in Bulacan, 11 now have modern sanitary markets. Unfortunately but 2 of these are provided with sanitary closets. Artesian water should be made available at all markets.

Sewage disposal.—Private families of means now provide modern sanitary facilities in new homes which are being built. The model sanitary closet which is recommended by the Bureau of Health is being installed in many private homes. The municipalities of Calumpit, Quingua, Paombong, and Baliuag have all enacted ordinances providing for the sanitary disposal of human excrement. A special effort has been made to induce all public officials to adopt such sanitary conveniences in their own homes, and it is a pleasure to report that all health officials and employees have done so. A public convenience station has been erected in the barrio of Atlag of Malolos after plans furnished by the Bureau of Health.

Drinking-water supply.—There has been a remarkable decrease in water-borne diseases in the past year in those municipalities which use artesian wells for drinking water. There are now in Bulacan 173 artesian wells supplying drinking water.

Food-protection measures.—Samples of "vino anisado" suspected of being adulterated with quick lime were sent to the Bureau of Science and reported as being satisfactory.

The bagon and bihon factories in Malolos have been improved with regard to sanitary conditions.

Frequent complaints have been made by consumers that carabao milk has been adulterated with water, coconut milk, or starch water, and at the present time all sanitary inspectors are provided with lactometers and instructions for the detection of starch and coconut milk as adulterants.

Obando fiesta.—The Obando fiesta, to which thousands of visitors flock, requires a large increase in the sanitary personnel in that municipality, as well as in Malolos, Pulilan, Calumpit, and Hagonoy. As has been the case from time immemorial throughout the world, whenever such pilgrimages occur, eternal vigilance is the price of health. The municipal council of Obando has approved the expenditures of ₱100 for the construction of three closets with 38 sanitary pails, all of Bureau of Health model. It is estimated that no less than 10,000 pilgrims visited the shrine during the first day, about 12,000 on the second, 8,000 on the third, and 4,000 on the fourth, at the fiesta during the past year.

Leprosy.—After publication of the report that treatment offers hope of cure of this malady, there has been a change in the attitude of the afflicted toward compulsory isolation and a number have voluntarily presented themselves to the health authorities or even paid their own transportation to San Lazaro Hospital. Thirty of the 39 suspected cases reported have been found positive.

Provincial laboratory.—The provincial laboratory has been in existence for over a year and has enabled the district health officer to do considerable necessary work. The advent of the cholera epidemic has prevented systematic reports.

Clean-up week.—Lectures were given by the district health officer on sanitation and considerable work done. The municipal authorities in gen-

eral coöperated most heartily in this work. Especially commendable was the work of the school children in Baliuag, San Miguel, San Ildefonso, and Malolos. In San Miguel and San Ildefonso the teachers and pupils headed the campaign for better closet conditions, with the result that all the barrio schools are now provided with fly-proof pit closets with portable sheds. Many private houses have installed sanitary closets.

Insane.—There were 65 known cases of insanity in the province.

Beriberi.—The 8 cases, 7 of infants, treated with tiqui-tiqui extract furnished by the "Liga Nacional para la Protección de la Primera Infancia" showed marked improvement. Experiments in the treatment of beriberi with allantoin were also successful.

Rabies.—Four dogs clinically positive for rabies were reported in Malolos. One case sent to the Bureau of Science proved negative for negri bodies.

Paratyphoid.—A number of cases resembling typhoid in which the blood was examined proved negative for typhoid reaction in all but one case. It is possible that these were paratyphoid cases.

The following other dangerous communicable diseases have been reported to this office during the first three quarters of the past year: Typhoid fever, 81 deaths; malaria, 436 deaths; anthrax, 3 deaths; cholera, 269 deaths.

CAGAYAN.

Malaria, as well as tuberculosis and convulsions of infants, were the diseases of most importance and were reported in all municipalities. Cases of yaws were registered in Pamplona and Claveria.

One provincial sanitary inspector was employed principally for the work of vaccination.

CAPIZ.

The municipality of Capiz is the only one in this province at the present time provided with a sanitary market. A few markets have been removed to more sanitary locations and buildings. The request for an Insular loan to establish a sanitary market at Banga has been granted and the market will soon be available for use.

Water supply.—The efforts to secure a good artesian water have so far been unsuccessful. Approval has been given for the construction of a cistern at Capiz, which will doubtless furnish better drinking water than is at present available.

Hospitals.—The Emanuel Hospital, under the auspices of the American Baptist Foreign Mission Society, has accomplished excellent work, having treated since April, 1913, 300 hospital cases, 2,000 out-patients, and 9,000 dispensary cases. The number of major operations performed was 150, with about 350 minor operations.

Medical service.—There is no doctor in this province outside of the municipality of Capiz.

Clean-up week.—Great interest was displayed in this innovation, several municipalities having decided to make it two weeks, and it has undoubtedly been a great success.

CEBU.

Provincial jail.—There were 75 prisoners in the provincial jail who received treatment by the provincial health officer during the past year.

Leprosy.—There were three leper collections during the year and the

province is gradually getting clean of the disease. The scheme of sending relatives of lepers to Culion to visit them at Government expense is going to have a far-reaching effect and will materially aid the health authorities in gathering in the ones remaining.

April, 1914	120
August, 1914	63
December, 1914	73
Total	256

Trachoma.—During the past year two examinations were made of a total of 4,656 school children, of whom 439 were found to have trachoma. The work of treating these cases is progressing and instruction is also being given to school children with regard to its prevention.

Water supply.—The Osmeña water system is now furnishing drinking water to the poor inhabitants of Cebu by means of 15 public hydrants, while many of the private houses also have water connections. In addition, there are a number of artesian wells which furnish satisfactory drinking water. The surface wells are being eliminated as rapidly as practicable. The deep drilled wells have so far shown no evidences of faecal contamination.

Sewage disposal.—Some progress has been made in strong material districts in the installation of modern plumbing with septic vaults.

Sanitary districts.—The province has been organized into 8 sanitary districts with a physician in charge of each district. These districts are apparently too large and a request has been made to increase the number to 14. Reports received from 4 of the 7 district physicians shows that they treated 2,410 indigent persons during the past year.

ILOCOS SUR.

Sanitary organization.—Of the 17 municipalities in the province, with a total of 202,600 population, 15 have sanitary officials at salaries varying from ₱7 to ₱63 per month. Vigan provides a municipal vaccinator and clerk for the assistance of the health officer.

Drinking-water supply.—The water supply of practically all the municipalities is derived from surface wells and rain water, with the exception of the municipality of Candon, where deeper wells have been protected from surface contamination and provided with pumps. Arrangements are under way to bring water from mountain springs to Vigan.

Tobacco factories.—At Santa Catalina there are three tobacco factories and the same number at Vigan, which are subjected to periodical sanitary inspection.

ILOILO.

The sanitary condition of the province in general has been very good.

One case of pneumonic plague and two cases of cholera occurred in the city of Iloilo, all of which came from outside and the outbreak in each instance was confined to the original cases. No cases of smallpox have occurred.

The condition of Iloilo City has been very materially improved by the installation of a large number of septic tanks in the larger houses and buildings and the installation of fly-proof or flush water closets.

A large amount of filling in of the low lands has also been done as well as the drainage of others.

LAGUNA.

Sewage disposal.—With the exception of a few private houses which have a water closet, the system in general use in the municipalities is the open-earth closet and in the small barrios is of the most primitive possible, in that such matter is thrown on the surface of the ground. During the past year an effort was made to get all barrios to adopt the system approved by the Bureau of Health, but only Los Baños and Majayjay have decided to do so during the coming year.

Drinking water supply.—More artesian wells are needed and money is being collected in several barrios to cover the cost of sinking them. San Pablo has secured an estimate on waterworks to cost ₱10,000.

LA UNION.

One sanitary section composed of the municipalities of Agoo, Santo Tomás, and Tubao, has been established.

Epidemics.—There were 567 cases of dysentery with 187 deaths during the recent epidemic.

The epidemic of cholera beginning in August spread rapidly during the unusual rainy season which caused several floods throughout this province. It is presumed that the spread of the disease was facilitated by the custom of eating raw fish and mollusca, especially those taken from rivers which were doubtless infected with fecal matter. The prohibition of the sale of such foods seems to have been followed by a decrease in the incidence of cholera in this province. The protection of running streams from fresh infection is essential where the lowlying lands are flooded and such matter is washed into the streams during the rainy season.

Instruction in hygiene by the Bureau of Health representative and compulsory enforcement of the measures advocated eventually proved effective in checking the epidemic. People have as a rule willingly coöperated in these efforts.

Sewage disposal.—Efforts to secure proper disposal of human excrement in this province seem to have been without satisfactory results as yet. The lesson which should have been learned from past epidemics has not produced results. Some progress has been made in the protection of food from contamination by handling and from flies by the use of screens in the markets.

Drinking water supply.—Of the two wells sunk, one has proved successful and is furnishing satisfactory drinking water.

Closets.—The Manila Railroad Company has provided closets in each of its stations in compliance with the order of the Public Utilities Board upon the request of this Bureau, which will prove an appreciable aid in improving sanitary conditions along its line.

LEYTE.

Epidemics.—A dangerous outbreak of smallpox, which at one time attacked 12 municipalities simultaneously, continued during almost the entire year before it was stopped. Vaccination was prosecuted as rapidly as possible, efforts being made to concentrate such work by means of a special vaccinating squad in those localities in which the largest number of cases were occurring. The total cases reached 266, while the deaths numbered 87.

Prevalent diseases.—The most prevalent diseases in the order of the deaths caused thereby are as follows: Pulmonary tuberculosis, malaria, infantile convulsions, diarrhoea and enteritis of children, acute bronchitis, beriberi, dysentery, and smallpox.

Sanitary divisions.—The province has been divided into 12 sanitary divisions, each having a health officer at a salary of from ₱100 to ₱150 per month. Each of the 41 municipalities is also provided with a sanitary inspector at a salary of ₱20 per month. Only 9 of the 12 posts of division physician have been filled up to December 31, 1914. The efficiency of the organization was well proved during the smallpox epidemic and it rendered good service.

Municipal health organization under Act No. 2156.—This entire health organization is to be discontinued December 31, 1914, under the present understanding, on account of lack of funds. If this occurs, it will be a most unfortunate sanitary retrogression.

Hospital at Tacloban.—The establishment of a hospital at Tacloban has been a long felt need in the community and this office, voicing the popular demand for one and upon the recommendation of the provincial governor who was also immensely interested in the idea, took the matter up with that office and furnished information and gave recommendations regarding the carrying out of same.

The original plan was to have the institution derive its main support from the yearly balances of the health fund, popular contributions to be secured likewise to help in defraying the expenses. In the meantime, a certain property located in the farthest eastern end of the town of Tacloban was selected for hospital purposes. However, authorization had to be obtained first before popular collections could be received and before the property mentioned above could be purchased.

Free dispensary.—The provincial board secured the services of and appointed a graduate of the Philippine Training School for Nurses as a provincial nurse, effective February 15, 1914, who, in addition to other duties, has charge of the dispensary.

The dispensary has been of service in relieving suffering among the poor and likewise rendered medical and surgical aid to Government officials and employees who applied therein for treatment.

Physical examinations of school children.—This work was conducted by the Filipina nurse at Tacloban, resulting in considerable improvement in the condition of school children. The presidents of the sanitary divisions performed the work in the other municipalities to the best of their ability.

Clean-up week.—Circulars were sent to all sanitary officers stating the plan to be followed and making suggestions as to the work to be done. Visits were made to the various municipalities by the district health officer prior to and during the "clean-up week," and there is evidence of much good having been accomplished.

Public markets.—Two new concrete markets were built during the year, one at Palo and the other at Baybay. There are now three concrete market buildings in the province and improved markets in 11 other municipalities.

Sanitary pail system.—This matter was taken up with all the municipalities, but on account of the financial crisis it has been impossible to secure the installation of the system as recommended in Bulletin No. 13 of the Bureau of Health. A modified system has been installed at Tacloban, San Isidro, Palompon, Ormoc, and Maasin, which is a combined pit and pail system, but leaving the final disposition of the material to

the people themselves. While it has objectionable features, it seems to be the best we can do at this time.

MISAMIS.

Sewage disposal.—Ten barrios have adopted ordinances for placing under the supervision of the health authorities the disposition of human excrement and garbage, as well as other matter which is deleterious to public health or offensive.

The medical authorities have also been entrusted with the abatement of nuisances.

Public latrines have been established in many barrios of this province.

In four other barrios the sanitary disposal of waste matter has been enforced by sanitary inspectors as a prophylactic measure.

Drinking water supply.—Cagayan, the capital of the province, has had 7 wells sunk, of which but one furnishes palatable water at the present time. It is notable that in the barrio of Camaguin, which uses water piped from springs, there has been a marked decrease in water-borne diseases.

Municipal dispensaries.—Each of the 14 municipalities in the province maintains a free dispensary in addition to that in the office of the district health officer. These at the present time are in charge of nonmedical men who dispense medicines in accordance with instructions contained in Bulletin No. 8 of the Bureau of Health. During the last three months of 1914, 1,014 persons have received treatment at these dispensaries.

Quinine distribution for prevention of malaria.—The following comparative table of deaths from malaria before and after the inception of free quinine distribution shows a marked decrease in the deaths from this cause.

	1913	1914
First quarter.....	209	178
Second quarter.....	213	112
Third quarter.....	295	139
Total.....	681	429

Infant mortality.—Considerable work has been done in the distribution of information and circulars of instruction for the care of mothers during parturition and of infants. Such instructions have been issued to be transmitted to the mothers by the sanitary inspectors and other Bureau of Health representatives.

Inspection of animals destined for human consumption.—Full instructions have been issued for the inspection of all such animals at the slaughterhouses and of the products therefrom, together with proper disposition of waste matter from the slaughterhouses.

NUEVA VIZCAYA.

Mortality statistics.—The general condition has improved. The decrease in the number of deaths below former years amounts to 672. The births equal 65.73 per 1,000.

Malaria.—An educational campaign with regard to the prevention of

malaria has been made and progress is rapid, as indicated in the following comparative table of deaths credited to this disease:

1911	229
1912	155
1913	120
1914	90

Simple-remedy packages.—Knowledge of the benefits to be derived from simple remedies as contained in the simple-remedies packages has extended to the remotest barrios in the mountains and frequent requests for such remedies are received.

Typhoid fever.—Several cases of typhoid occurred in this province but prompt measures to prevent its spread were successful.

Tuberculosis.—Sixty-five tuberculosis cases have been treated at the dispensary. Advice has been given to the public with regard to the communicable character of this disease and the methods of prophylaxis.

Infant mortality.—The following steps have been taken in the campaign for the reduction of infant mortality: Instructions to mothers in regard to the care of infants, explaining the errors in many traditions with regard to infant care.

Conferences.—Numerous meetings have been held by the district health officer in the barrios and haciendas throughout the province in the endeavor to diffuse the general ideas and methods for the prevention of dangerous communicable diseases.

Clean-up week.—An inspection trip throughout the province has been made by the district health officer and employees of this Bureau, which enabled them to secure thorough coöperation of the people during clean-up week, and sanitary conditions have been greatly improved.

OCCIDENTAL NEGROS.

The general sanitary condition of the province is satisfactory. No epidemic has occurred during the past year. The number of births exceeds the deaths by a large percentage.

Education.—An educational campaign has been conducted by means of popular conferences, lectures, and circulars, besides inspection trips of the district health officer.

Clean-up week.—Clean-up week was very fruitful of results, both in the amount of improvement in sanitary conditions and the spirit of coöperation.

Some municipalities have become very enthusiastic and adopted a clean-up week during each month. The school children under the direction of representatives of the Bureau of Education were of great assistance in carrying out this work.

Pail system.—The municipalities of Talisay, Sagay, San Carlos, Valladolid, La Carlota, Hinigaran, Isabela, Himamaylan, Kabancalan, Silay, Manapla, Ilog, and Escalante have adopted the pail system. It is hoped to secure the adoption of a similar system in the other municipalities during the coming year.

Municipal sanitary boards.—Municipal sanitary boards have been organized in Silay, La Carlota, San Carlos, and Kabancalan.

Artesian wells.—These have been one of the most important means for improving public health, as a uniform decrease in mortality has been observed in those municipalities which have been provided with drinking

water from artesian wells. Seventeen additional wells have been opened during 1914. A number of artesian wells have also been drilled at private expense on some of the haciendas where marked improvement in health conditions has been noted, and it is believed that even the cattle benefit from such an improved water supply.

Public markets.—Only one modern concrete market building has been constructed in this province in the municipality of La Carlota. Two others are under construction at Hinigaran and San Carlos.

School buildings.—The school buildings in the province are kept in good sanitary condition. The closets are usually satisfactory.

Malaria and quinine.—Malaria, which includes recurrent fever, takes the first place among the known preventable diseases as a cause of death in this province. Quinine has been distributed, generally through school teachers, as there are no physicians in this province outside of Silay and La Carlota.

Dysentery.—Dysentery has decreased in those localities in which artesian wells have been drilled.

Infantile convulsions.—While the actual causes of deaths under this heading are not known, doubtless they might be largely decreased by proper instruction of mothers. There is need of trained nurses in various municipalities of the province to attend to such instruction.

Medical service.—As will be seen from other tables, of the 6,048 deaths occurring during 1914, but 46 had been receiving medical attention, so that 6,002 persons died without such service, while many others suffered from severe illness which medical service could have prevented, alleviated, or cured.

ORIENTAL NEGROS.

Clean-up week.—"Clean-up week" has been generally observed, being conducted by local committees who have carried out more or less efficiently the recommendations of the district health officer for the improvement of sanitary conditions.

Drinking water supply.—A notable decrease in the number of deaths from intestinal diseases has resulted in those municipalities of the Island of Siquijor which have artesian wells or properly protected springs as a source of drinking water supply.

Smallpox and vaccination.—There were 13 cases of smallpox and no deaths. The vaccinations numbered 25,973.

Sewage disposal.—Good progress is being made in the general installation of sanitary sewage disposal systems, though many barrios do not yet give this matter proper attention.

Cemeteries.—Notwithstanding repeated requests that cemeteries comply with the requirements of the Bureau of Health, with one exception they are in an insanitary condition. Some improvement is being gradually secured, however.

PAMPANGA.

Malaria.—The deaths from malaria during the first quarter were 149; second quarter, 169; third quarter, 117; fourth quarter, 170; total, 605.

The rural populace think that 10 or 20 centavos worth of quinine should be sufficient, and when they have used that quantity do not buy any more but carry out further treatment with roots and herbs, so that satisfactory progress has not been made in the prevention of this disease.

Beriberi.—There was a notable increase in the number of cases of

beriberi during the third and fourth quarters. It seems that 25 to 30 per cent of the deaths ascribed to infantile convulsions are due to beriberi.

Sanitary districts.—Two sanitary districts have been formed by the union of the municipalities of Lubao with Floridablanca and Arayat with Santa Ana. Further endeavor will be made during the present year to form other sanitary districts.

Cemeteries.—The provincial cemeteries have generally been found in insanitary condition. Efforts are being made to remedy such faults.

Sewage disposal.—San Fernando has appropriated the sum required for the construction of public sanitary midden sheds at the markets. The general sanitary sewage disposal system is still being considered by the municipal council. Guagua has approved the construction of a public closet at the market. Angeles has also under consideration a sanitary sewage disposal system.

Drinking water supply.—The total number of artesian wells in the province at the present time is 242. The municipalities of Arayat, Floridablanca, Magalan, Porac, and Santa Ana have as yet not been successful in securing a flow of satisfactory drinking water.

Markets.—The municipalities of Angeles, Arayat, Bacolor, Guagua, Lubao, Macabebe, Mexico, and San Fernando are provided with sanitary modern concrete markets.

PANGASINAN.

Epidemics.—An epidemic of typhoid broke out in Alaminos, but, through an educational campaign and the ready coöperation of the people in subjecting themselves to vaccination, the epidemic was quickly controlled. There was but one case occurring in a person who had been vaccinated against typhoid. This probably is the first time in the history of the Philippines in which an entire municipality has received the benefits of this preventive measure and it proved a notable success.

Pail system.—Vigorous efforts of the district health officer have secured the establishment of a sanitary pail system in the municipality of Lingayen. This measure at first caused considerable complaint, but has finally convinced the people of its desirability and necessity. The efficiency of the measure was shown by the absence of cholera cases in this municipality during the recent epidemic—the first time in its history that it has been so favored. It is possible that a similar sanitary pail system will be enforced in the municipality of Dagupan early in 1915.

Clean-up week.—This has been a great success and met with popular approval.

RIZAL, CAVITE, AND BATAAN.

A sanitary closet system was in force in Antipolo during the period of the fiesta, but was suspended at the termination of that period and has not been reestablished. The net results of this work have been the establishment of sanitary closets in some public institutions such as the provincial jail and municipal building at Pasig, in the barrio of Maytubig, the public school at Cavite, and government buildings at Bataan, dance halls, cinematograph theaters, and high school at Orani and the intermediate school at Balanga.

Garbage disposal.—The municipality of Cavite has under consideration the construction of a crematory for garbage disposal.

Water supply.—Artesian wells; 38 have been opened in this district and are furnishing satisfactory water at the present time.

Medical service.—There is no hospital in this district at the present time. The municipal health officers conduct free dispensaries to the best of their ability, but owing to their frequent absence the service is not satisfactory.

Epidemic diseases.—Typhoid fever: There have been fewer cases of typhoid fever in this district during the past year, doubtless due to the better drinking water supplies furnished by artesian wells.

Varicella: The number of cases has been less than in previous years.

Varioloid: There were 3 cases, none of them fatal.

Dysentery: Fifty-two cases of dysentery with 20 deaths have been reported. There were doubtless others that were not reported.

Measles: Thirty-one cases of measles with no deaths were reported.

Conjunctivitis: An epidemic of over 100 cases of conjunctivitis occurred in the municipality of Tanza but fortunately all resulted in complete recovery.

ROMBLON.

The water supply of the municipality of Romblon has been protected by the removal of some persons inhabiting the water shed. The Island of Romblon is provided with good drinking water from numerous springs. The Island of Tablas, however, has but one barrio which secures its drinking water from a similar source. The remainder of the island has no satisfactory supply of drinking water.

Sewage disposal.—With the exception of the municipality of Romblon, where the pail system has been installed, the conditions are of the most primitive character and there is urgent need for improvement.

Medical service.—On the entire Island of Romblon there is no resident physician, no drug store, no cirujano ministrante, nor even a trained nurse, so that illness in this entire island goes without medical treatment except such as is given by the district health officer. The annual mortality is about 1,600, very few of whom receive any experienced medical attention.

Epidemics.—Smallpox made its appearance after an absence of ten years, probably brought in by laborers returning from Masbate. As the epidemic began during the absence of the district health officer on cholera duty in Mindoro, adequate measures were not taken in the beginning and 42 cases occurred with 4 deaths. A number of those contracting the disease showed marks of vaccinations which were insufficient to have been considered successful. This was doubtless due to the length of time required for the transportation of the vaccine virus to the towns at a distance from regular ports of call.

New hospital.—The long-continued efforts of the district health officer to secure the establishment of a hospital at Romblon have resulted in securing a fund from popular subscription, provincial and Insular appropriations, which will enable some progress to be made during the coming year.

SORSOGON.

Water supply.—In six municipalities there are a total of 15 artesian wells. Elsewhere rain water or shallow wells furnish the drinking water supply.

Markets.—Three municipalities have strong-material markets which are kept in fair sanitary condition.

Food supplies.—There is need of improvement in the methods of preparation and conservation of food supplies in general throughout the province.

SURIGAO.

A pail system has been established in the municipality of Surigao. A sanitary market has also been constructed.

A free dispensary has been maintained by the district health officer.

An outbreak of smallpox continued from March to November before it was controlled by quarantine and vaccination. On account of slow transportation facilities and the lack of proper means for preserving the vaccine there have been a large proportion of unsuccessful vaccinations in this province, to which is doubtless due the extent of the present outbreak.

TARLAC.

Malaria and quinine.—Distribution of quinine has been noticeably effective in reducing the number of deaths from malaria.

Sanitary pail system.—The municipalities of Moncada, Paniqui, and Tarlac have adopted an ordinance for the installation of a sanitary pail system. In the municipalities of Concepción, Victoria, Gerona, and Camiling the adoption of this ordinance was postponed on account of the alleged lack of funds.

Water supply.—There are at present 55 artesian wells in this province. The greater part of the water supply of the province comes from ordinary dug wells.

Markets.—At the present time there are 6 modern concrete market buildings in this province, one each in the municipalities of Tarlac, Victoria, Gerona, Paniqui, Moncada, and Camiling. There is a new strong material market under construction in Concepcion.

Epidemic diseases.—A number of cases of dysentery were reported in the municipalities of Camiling, Moncada, and Paniqui toward the end of the third quarter and first part of the fourth quarter. Preventive and suppressive measures, including conferences and instruction of the people, caused the prompt disappearance of the disease about the middle of November.

TAYABAS.

Death rate, 28.1 per 1,000. Birth rate, 48.5. Prevalent diseases: Tuberculosis, beriberi, infantile convulsions, diarrhœa and enteritis, dysentery, typhoid, and typhus.

Medical service.—Of the deaths in this province, 736 had received medical attention; 3,518 did not.

Hospitals.—Lucena has a charity hospital of 22 beds, into which 77 patients were admitted during the year, with 7 deaths. At Tayabas is a small hospital, under the auspices of the Catholic Church authorities, with 6 beds. Sixty-five patients were admitted during the year. These are usually poor incurables. There were 14 deaths.

ZAMBALES.

Sanitary organization.—There are nine municipalities which provide for health officers, at salaries ranging from ₱11 to ₱40 per month.

Sewage disposal.—Ordinances providing for sanitary disposition of human excrement have been approved by 10 of the municipalities of this province.

"Clean-up week."—"Clean-up week" proved a most helpful innovation and has been generally observed in improving sanitary conditions.

LEGISLATION.

The following legislation enacted by the Third Philippine Legislature, second session, contains matter of interest to this Bureau.

Act No. 2317.—Amendment to Food and Drugs Act, requires statement on the package of quantity or number of units in contents.

Act No. 2339.—Section 72 places a tax on skimmed milk. Section 124 provides for placing on skimmed milk containers the statement "This milk is not suitable for nourishment for infants less than one year of age."

Act No. 2342.—Prohibits false, fraudulent, or misleading advertisements or labels of patent and proprietary medicines, and the advertisement and sale of fraudulent therapeutic devices.

Act No. 2348.—Appropriates ₱5,000 for the encouragement of athletics.

Act No. 2370.—Appropriates ₱70,000 for the support of various specified semi-public charities, in lieu of a lump sum for the medical and surgical treatment of the poor.

Act No. 2376.—Appropriates ₱6,000 for extract of tiquitiqui to be used for the treatment of beriberi, distributed under the direction of the Philippine National League for the Protection of Early Infancy.

Act No. 2378.—Appropriates:

BUREAU OF LANDS.

For filling in low land in Manila..... ₱10,000

BUREAU OF HEALTH.

For San Lazaro Hospital, construction and equipment of new crematory	6,000
Culion leper colony:	
For hospital buildings and houses.....	35,000
For improvement of water systems and general repairs.....	15,000
Bilibid Prison sanitation division, for permanent sanitary improvements	3,000
Total, Bureau of Health.....	59,000

BUREAU OF PUBLIC WORKS.

For the drilling of artesian wells..... 420,000

Act No. 2381.—Provides for the restriction of the use of opium and other prohibited drugs.

Act No. 2382.—Amends previous Acts regulating the practice of pharmacy in the Philippine Islands.

Act No. 2395.—Among other things, appropriates ₱3,000 for repair of Bureau of Health buildings in the territories inhabited by the non-Christian tribes.

Act No. 2406.—Appropriates ₱21,170 for Bureau of Health work in the Mountain Province and subprovinces.

Act No. 2407.—Appropriates for the maintenance of public dispensaries and hospitals in Mindanao and Sulu.

Act No. 2408.—Provides a temporary form of government for the territory known as the Department of Mindanao and Sulu and, among other matters, provides for a health officer and assistance.

Act No. 2423.—Appropriates ₱130,000 toward the expense of dispensaries, hospitals and health service in the Department of Mindanao and Sulu.

ORDINANCES, CITY OF MANILA.

The following Manila ordinances have reference to matters of sanitation and disease prevention:

No. 212.—Appropriates ₱6,000 for the construction of drains, on Calles Melchor Cano and Lorenzo Chacon.

No. 217.—Provides for rat-proof construction in buildings to be erected.

No. 222.—Appropriates ₱4,791.85 to cover deficit on account of public charities.

No. 225.—Defines areas which are not to be contaminated with rubbish or garbage.

No. 226.—Appropriates ₱1,200 for the support of the orphan asylum maintained by the Belgian Canonesses missionaries.

No. 231.—Provides that pure water shall be furnished for drinking purposes to patrons of hotels, restaurants, boarding houses, etc.



VITAL AND GENERAL STATISTICS FOR THE PHILIPPINE ISLANDS.

[For the calendar year 1914.]

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GENERAL STATISTICS.

[Unless otherwise stated these statistics are for the fiscal year ended December 31, 1914.]

POPULATION OF THE CITY OF MANILA.

[Health census 1914.]

BY NATIONALITIES.

Nationality.	Male.	Female.	Total.
Americans	3,584	1,890	5,474
Filipinos	125,730	111,210	236,940
Spaniards	2,414	1,992	4,406
Other Europeans	1,027	479	1,506
Chinese	15,235	1,422	16,657
All others	1,407	553	1,960
Total	149,397	117,546	266,943

BY DISTRICTS.

Health districts.	Male.	Female.	Total.
No. 1, Intramuros	18,467	13,586	32,053
No. 2, Meisic	57,121	32,943	90,064
No. 4, Sampaloc	22,856	21,367	44,223
No. 5, Tondo	36,520	35,279	71,799
No. 6, Paco	14,433	14,371	28,804
Total	149,397	117,546	266,943

MARRIAGES.^a

Nationality.	Total marriages.	Health district—					Single males married—		Widowed males married—		
		No. 1.	No. 2.	No. 4.	No. 5.	No. 6.	Single female.	Widowed female.	Divorced female.	Single female.	Widowed female.
Americans	90	63	14	1	8	4	66	11	3	6	1
Filipinos	2,182	237	944	209	704	98	1,820	122	139	101	.....
Spaniards	1	1	1	.....	.....	.....	1	.....	.....	.....	.....
Other Europeans	13	8	4	1	.....	.....	9	3	.....	1	.....
Chinese	48	3	20	3	21	1	33	7	.....	6	2
All others	2	.....	1	1	.....	.....	1	1	.....	.....	.....
Total	2,336	311	984	215	733	93	1,930	144	3	152	104

Marriages—Continued.

Nationality.	Divorced males married—				Nationality of brides.					Relation-ship.	
	Single female.	Widowed female.	Divorced female.	Americana.	Filipinos.	Spaniards.	Other Europeans.	Chinese.	All others.	Blood.	Affinity.
Americans	2		1	45	36	1	4		4		
Filipinos					2,181			1		10	
Spaniards					1						
Other Europeans				1	5		7				
Chinese					48						
All others					2						
Total	2		1	46	2,273	1	11	1	4	10	

^a Registration incomplete.

Average per thousand population, 17.50.

MARRIAGES BY AGES.^a

Males.		Females.						
Age.	Num-ber.	To 14 years.	To 20 years.	To 25 years.	To 30 years.	To 40 years.	To 50 years.	Over 50 years.
To 14 years								
To 20 years	676	5	571	78	17	5		
To 25 years	944		621	247	53	18		
To 30 years	338	1	155	101	61	19	1	
To 40 years	265		72	79	65	46	3	
To 50 years	74		12	13	13	26	10	
Over 50 years	39		2	4	3	13	12	5
Total	2,336	6	1,433	522	217	127	26	5

^a Registration incomplete.

BIRTHS REPORTED.^a

Nationality.	Males.	Annual birth rate per 1,000.	Females.	Annual birth rate per 1,000.	Total.	Annual birth rate per 1,000.
Americans	87	24.27	96	50.79	183	33.43
Filipinos	4,760	37.77	4,320	38.84	9,070	38.27
Spaniards	28	11.59	25	12.55	53	12.02
Other Europeans	24	23.36	32	66.80	56	37.18
Chinese	121	7.94	99	69.62	220	13.20
All others	7	4.97	10	18.08	17	8.67
Total and average	5,017	33.58	4,582	38.98	9,599	35.95

^a Registration incomplete.

BIRTHS, BY DISTRICTS.*

Health districts.	Legitimates.			Illegitimates.			Grand total.	Annual birth rate per 1,000.
	Male.	Female.	Total.	Male.	Female.	Total.		
No. 1, Intramuros	642	635	1,277	53	41	94	1,371	42.77
No. 2, Meisic	1,068	964	2,032	41	39	80	2,112	23.44
No. 4, Sampaloc	958	852	1,810	78	59	137	1,947	44.02
No. 5, Tondo	1,397	1,299	2,696	61	38	99	2,795	38.92
No. 6, Paco	684	627	1,311	35	28	63	1,374	47.70
Total	4,749	4,377	9,126	268	206	473	9,599	35.95

	Living.	Still-births.
Births attended by—		
Physician	1,755	147
Midwife	3,286	80
Family	4,578	254

* Registration incomplete.

BIRTHS, ACCORDING TO NUMBER OF CHILDREN BORNE BY MOTHER.

Number of births in the order in which the child was born, whether first child, second child, etc.	Living.		Total.	Stillborn.		Total.	Grand total.
	Male.	Female.		Male.	Female.		
First	1,051	1,009	2,060	66	42	108	2,168
Second	915	840	1,755	53	38	91	1,846
Third	774	655	1,429	33	20	53	1,482
Fourth	652	564	1,216	25	17	42	1,258
Fifth	436	418	854	22	15	37	891
Sixth	389	302	691	19	15	34	725
Seventh	256	252	508	14	13	27	535
Eighth	175	182	357	12	15	27	384
Ninth	124	119	243	6	8	14	257
Tenth	105	101	206	5	5	10	216
Eleventh	55	46	101	9	3	12	113
Twelfth	39	42	81	6	4	10	91
Thirteenth	23	26	49	5	3	8	57
Fourteenth	10	9	19	2	2	4	23
Fifteenth	6	7	13	1		1	14
Sixteenth	4	6	10				10
Seventeenth	1		1		1	1	2
Eighteenth	1	2	3				3
Nineteenth	1	1	1	1		1	2
Twentieth	1	1	1	1		1	2
Twenty-first							
Twenty-second	1		1				1
Total	5,017	4,582	9,599	280	201	481	10,080

NUMBER OF DEATHS AND DEATH RATE PER 1,000 AMONG RESIDENTS, BY NATIONALITIES.

Nationality.	Males.	Annual death rate per 1,000.	Females.	Annual death rate per 1,000.	Total.	Annual death rate per 1,000.
Americans	24	6.69	8	4.23	32	5.84
Filipinos	3,368	26.78	2,895	26.03	6,263	26.43
Spaniards	24	9.94	14	7.02	38	8.62
Other Europeans	7	6.81	2	4.17	9	5.97
Chinese	211	13.84	13	9.14	224	13.44
All others	14	9.95	7	12.65	21	10.71
Total and average	3,648	24.41	2,939	25.00	6,587	24.67

**A CLASSIFIED REPORT OF ALL DEATHS OCCURRING IN MANILA, INCLUDING
TRANSIENTS.**

Social condition.	Males.	Females.
Married	1,031	707
Divorced		2
Widowed	268	467
Single	539	161
Children	2,568	2,014
Condition not stated	37	17
Total	4,443	3,368
Grand total	7,811	

Stillbirths	521
Deaths with medical attendance	5,176
Deaths without medical attendance	2,635

DEATHS, BY AGES.

Ages.	Residents.		Transients.		Total.
	Male.	Female.	Male.	Female.	
Under 30 days	496	360	31	25	912
30 days to under 1 year	1,112	840	258	203	2,413
1 year to under 2 years	267	241	27	19	554
2 years to 4 years	205	204	26	18	453
5 years to 9 years	73	66	10	6	155
10 years to 14 years	40	22	9	3	74
15 years to 19 years	102	73	48	13	236
20 years to 29 years	251	228	119	57	655
30 years to 39 years	264	229	86	30	609
40 years to 49 years	260	178	80	26	544
50 years to 59 years	201	120	44	10	375
60 years to 69 years	169	102	33	7	311
70 years to 79 years	105	111	11	4	231
80 years to 89 years	63	90	3	3	159
90 years to 99 years	24	46	2	0	72
100 years and over	12	25	0	0	37
Age not stated	4	4	6	3	17
Total	3,648	2,939	793	427	* 7,807

* Four bodies unidentifiable as to age and permanent residence, not included.

DEATHS AND DEATH RATE PER 1,000, BY DISTRICTS, INCLUDING TRANSIENTS.

Health districts.	Deaths.	Annual death rate per 1,000.
No. 1, Intramuros	1,200	37.43
No. 2, Meisic	1,648	18.29
No. 4, Sampaloc	1,246	28.17
No. 5, Tondo	3,017	42.02
No. 6, Paco	700	24.30
Total	7,811	29.26

NUMBER OF DEATHS, WITH CAUSES, OCCURRING AMONG RESIDENTS IN THE CITY OF MANILA (STILLBIRTHS NOT INCLUDED).

[illegible]

Number of deaths, with causes, occurring among residents, etc.—Continued.

Causes of death.	Americans.		Filipinos.		Spaniards.		Other Europeans.		Chinese.		All others.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
VIII. Diseases of the skin and of the cellular tissue.													
142. Gangrene			5	2									7
143. Furuncle			3	1									4
144. Acute abscess			8	1									9
IX. Diseases of the bones and of the organs of locomotion.													
146. Diseases of the bones (tuberculosis excepted)			1										1
X. Malformations.													
150. Congenital malformations (stillbirths not included):													
(1) Hydrocephalus			1										1
(2) Congenital malformations of the heart			1	4									5
(3) Other congenital malformations			1	3									4
XI. Diseases of early infancy.													
151. Congenital debility, icterus, and sclerema	1	1	56	32							1		91
(1) Premature birth (not still-born)	1	1	22	11					3	2			35
(2) Congenital debility	1		303	228		1					1		539
152. Other diseases peculiar to early infancy:													
(1) Injuries at birth (not still-born)		1											1
(2) Other causes peculiar to early infancy	1		17	11	1								30
XII. Old age.													
154. Senility			83	157					2				242
XIII. Affections caused by external causes.													
155. Suicide by poison			1	2					2				5
159. Suicide by firearms			2										2
160. Suicide by cutting or piercing instruments			2										2
165b. Other acute poisonings			1	2					1				4
167. Burns (conflagration excepted)			6	6									12
169. Accidental drowning			12	5					3				20
170. Traumatism by firearms			1										1
171. Traumatism by cutting or piercing instruments			2						1				3
172. Traumatism by fall			5	3					1				9
175. Traumatism by other crushing (vehicles, railways, landslides, etc.)			8						2				10
176. Injuries by animals			1										1
181. Electricity (lightning excepted)			3										3
183. Homicide by cutting or piercing instruments			2	6					3				11
185. Fractures (cause not specified)			6	1									7
186. Other external violence			5	1									6
XIV. Ill-defined diseases.													
188. Sudden death			1										1
189. Cause of death not specified or ill-defined			18	16	1				1	1	1	1	39
Total	24	8	3,368	2,895	24	14	7	2	211	13	14	7	6,587
Grand total	32		6,263		38		9		224		21		6,587

Causes of death.	Americans.		Filipinos.		Spaniards.		Other Europeans.		Chinese.		All others.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
I. General diseases.													
1. Typhoid fever.....			24	15					2		5		46
4. Malaria.....			9	3			1						13
8. Whooping cough.....			1	3									4
9. Diphtheria and croup.....			4	2									6
10. Influenza.....				1			1						2
12. Asiatic cholera.....	1	1	19	11			1		1		1		35
14. Dysentery.....			12	4					1				20
15. Plague.....			4						1				5
17. Leprosy.....			5										5
18. Erysipelas.....			1										1
20. Purulent infection and septicæmia.....	1		6	4			1		1				13
21. Glanders.....			2										2
24. Tetanus.....			2	4									6
27. Beriberi.....		1	109	86					8				204
28. Tuberculosis of the lungs.....			102	28	1				4		1		136
29. Acute miliary tuberculosis.....			2	2									4
30. Tuberculosis meningitis.....			8	3									11
31. Abdominal tuberculosis.....			4										4
32. Pott's disease.....			2										2
34. Tuberculosis of other organs.....			1	2									3
35. Disseminated tuberculosis.....			4										4
37. Syphilis.....			2	1	1								4
39. Cancer and other malignant tumors of the buccal cavity.....			2										2
40. Cancer and other malignant tumors of the stomach, liver.....			7	2	1								10
42. Cancer and other malignant tumors of the female genital organs.....				1									1
45. Cancer and other malignant tumors of other organs and of organ not specified.....	1		2	5					1				9
50. Diabetes.....				1									1
54. Anæmia, chlorosis.....				1									1
56. Alcoholism (acute or chronic).....			1										1
II. Diseases of the nervous system and of the organs of special sense.													
60. Encephalitis.....									1				1
61. Simple meningitis.....	1		25	16					1		1		44
61a. Meningitis, cerebro-spinal, epidemic.....				1					1				2
62. Locomotor ataxia.....	1												1
63. Other diseases of the spinal cord.....				2									2
64. Cerebral hæmorrhage, apoplexy.....	1		10	2					1				14
65. Softening of the brain.....									3				3
66. Paralysis without specified cause.....				1									1
68. Other forms of mental alienation.....	1		7	4							1		13
71. Convulsions of infants (under 5 years of age).....	1		24	21					1				46
III. Diseases of the circulatory system.													
77. Pericarditis.....			2										2
78. Acute endocarditis.....			1	3	1								5
79. Organic diseases of the heart.....		1	12	5	1	1	1	1	3				21
81. Diseases of the arteries, atheroma, aneurysm, etc.....	1		3	2	1								6
82. Embolism and thrombosis.....			1	1									2
84. Diseases of the lymphatic system (lymphangitis, etc.).....			1										1
IV. Diseases of the respiratory system.													
88. Diseases of the thyroid body.....			1	1									2
89. Acute bronchitis.....			49	41									90
90. Chronic bronchitis.....			11	4									15
91. Broncho-pneumonia.....		1	4	13									17
92. Pneumonia.....			12	7			1		1				21
93. Pleurisy.....			2	1	1				1				5
94. Pulmonary congestion, pulmonary apoplexy.....			1	1									2
95. Gangrene of the lungs.....			2										2
97. Pulmonary emphysema.....				1									1
98. Other diseases of the respiratory system (tuberculosis excepted).....			2	1									3

Number of deaths, with causes, occurring among transients, etc.—Continued.

Causes of death.	Americans. Male. Female.	Filipinos. Male. Female.	Spaniards. Male. Female.	Other Europeans. Male. Female.	Chinese. Male. Female.	All others. Male. Female.	Total.
<i>V. Diseases of the digestive system.</i>							
99. Diseases of the mouth and adnexa			1				1
100. Diseases of the pharynx		1					1
102. Ulcer of the stomach		1				1	2
103. Other diseases of the stomach (cancer excepted) .		1					1
104. Diarrhoea and enteritis (under 2 years).	1	22	13				36
105. Diarrhoea and enteritis (2 years and over).		7	4		1	1	13
106. Ankylostomiasis		5					5
108. Appendicitis and typhlitis		1			1		2
109. Hernias, intestinal obstructions	1	1	1				3
110. Other diseases of the intestines		7	1				8
113. Cirrhosis of the liver	2	4	1				7
114. Biliary calculi		2			1		3
115. Other diseases of the liver		3	3				6
117. Simple peritonitis (nonpuerperal)	1	5	4		1		11
<i>VI. Nonvenereal diseases of the genito-urinary system and adnexa.</i>							
119. Acute nephritis		3	1				4
120. Bright's disease		33	7		1		41
122. Other diseases of the kidneys and adnexa.		4	3	1			8
123. Calculi of the urinary passages		1	1	1			3
124. Diseases of the bladder			1				1
126. Diseases of the prostate			1				1
131. Cysts and other tumors of the ovary ..			3				3
<i>VII. The puerperal state.</i>							
134. Accidents of pregnancy			2				2
135. Puerperal hæmorrhage			10				10
136. Other accidents of labor			4				4
137. Puerperal septichæmia			3				3
138. Puerperal albuminuria and convulsions.	1		1				2
<i>VIII. Diseases of the skin and of the cellular tissue.</i>							
142. Gangrene		2					2
144. Acute abscess			1				1
145. Other diseases of the skin and adnexa.		1					1
<i>IX. Diseases of the bones and of the organs of locomotion.</i>							
146. Diseases of the bones (tuberculosis excepted).		1					1
<i>X. Malformations.</i>							
150. Congenital malformations (stillbirths not included):							
(2) Congenital malformations of the heart.			1				1
(3) Other congenital malformations.	1		2				3
<i>XI. Diseases of early infancy.</i>							
151. Congenital debility, icterus, and sclerema.		15	15		1		31
(1) Premature birth (not still-born)			3				3
(2) Congenital debility	1	28	19				48
<i>XII. Old age.</i>							
154. Senility		4	1				5

Number of deaths, with causes, occurring among transients, etc.—Continued.

Causes of death.	Amer- icans.		Fili- pinos.		Span- iards.		Other Euro- peans.		Chi- nese.		All others.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
<i>XIII. Affections caused by external causes.</i>													
155. Suicide by poison	1												1
159. Suicide by firearms	1												1
167. Burns (conflagration excepted)	1		5										6
169. Accidental drowning											1		1
171. Traumatism by cutting or piercing instruments.			3										3
172. Traumatism by fall	1		1	1									3
174. Traumatism by machines			1										1
175. Traumatism by other crushing (vehicles, railways, landslides, etc.).			11				1		1				13
176. Injuries by animals			2										2
183. Homicide by cutting or piercing instruments.			1	1									2
185. Fractures (cause not specified)			3	1							1		5
186. Other external violence			13										13
<i>XIV. Ill-defined diseases.</i>													
189. Cause of death not specified or ill-defined.			6	2			1		2			1	12
Total	19	6	704	416	9	1	10	2	38		13	2	1,220
Grand total	25		1,120		10		12		38		15		1,220

NUMBER OF DEATHS BY NATIONALITY, SEX, AND AGE.

Causes of death.	Under 30 days.										30 days to under 1 year.										1 year to under 2 years.															
	Amer- icans.		Fili- pinos.		Span- iards.		Other Euro- peans.		Chi- nese.		All oth- ers.		Amer- icans.		Fili- pinos.		Span- iards.		Other Euro- peans.		Chi- nese.		All oth- ers.		Amer- icans.		Fili- pinos.		Span- iards.		Other Euro- peans.		Chi- nese.		All oth- ers.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
<i>I. General diseases.</i>																																				
4. Malaria																																				
8. Whooping cough																																				
9. Diphtheria and croup																																				
10. Influenza																																				
12. Asiatic cholera			2										1		19	10									1		4	8					1			
14. Dysentery															14	8											19	9								
15. Plague			1												4	9											4	1	2							
18. Erysipelas			1												4	5											4	1	2							
20. Purulent infection and septichæmia	1						1								4	5											5	12								
20. Tetanus	48						1						2	473	358											6	7									
24. Tetanus	36						1								10	5											11	10	2							
27. Beriberi	29														1																					
28. Tuberculosis of the lungs															1																					
30. Tuberculous meningitis															1																					
31. Abdominal tuberculosis															1																					
34. Tuberculosis of other organs															1																					
35. Disseminated tuberculosis															2	1																				
36. Rickets															1																					
37. Syphilis	1																																			
54. Anæmia, chlorosis																																				
<i>II. Diseases of the nervous system and of the organs of special sense.</i>																																				
61. Simple meningitis			1	3									1		57	48											41	29								
63. Other diseases of the spinal cord															1	2											1									
64. Cerebral hæmorrhage, apoplexy	2	2																																		
71. Convulsions of infants (under 5 years of age)	49	31													138	97											8	7								

VI. Nonvenereal diseases of the genitourinary system and adnexa.

119. Acute nephritis.
120. Bright's disease.

VIII. Diseases of the skin and of the cellular tissue.

142. Gangrene.....
143. Furuncle.....
144. Acute abscess.....
145. Other diseases of the skin and adnexa.....

X. Malformations.

150. Congenital malformations (stillbirths not included):

2. Congenital malformations of the heart
3. Other congenital malformations

XI. Diseases of early infancy.

151. Congenital debility, icterus and sclerema.
 1. Premature birth (not stillborn)
 2. Congenital debility
152. Other diseases peculiar to early infancy:
 1. Injuries at birth (not stillborn)
 2. Other causes peculiar to early infancy

XIII. Affections caused by external causes.

165b. Other acute poisonings.....
167. Burns (conflagration excepted).....
172. Traumatism by fall.....
185. Fractures (cause not specified).....
186. Other external violence.....

XIV. Ill-defined diseases.

189. Cause of death not specified or ill-defined

Total

Grand total-

[illegible]

IX Diseases of the bones and of the organs of locomotion.

146. Diseases of the bones (tuberculosis excepted)

XII. Old age.

154. Senility

XIII. Affections caused by external causes.

155. Suicide by poison

159. Suicide by firearms

169. Accidental drowning

171. Traumatism by cutting or piercing instruments

172. Traumatism by fall

176. Traumatism by the crushing (vehicles, railways land-slides, etc)

176. Injuries by animal

181. Electricity (lightning excepted)

183. Homicide by cutting or piercing instruments

185. Fractures cause (not specified)

186. Other external violence

XIV. Ill-defined diseases.

188. Sudden death

189. Cause of death not specified or ill-defined

Total

Grand total

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DEATHS, BY OCCUPATION.

Occupation.	Male.	Female.
Professional:		
Architects, artists, teachers of art, etc.	4	
Clergymen, priests, nuns, etc.	8	7
Engineers and surveyors.	3	
Journalists		
Lawyers.	4	
Musicians and teachers of music.	13	
Nurses and midwives		3
Physicians and surgeons		
Teachers (school)	10	6
Others of this class	5	2
Clerical and official:		
Bookkeepers, clerks, and copyists	80	2
Bankers, brokers, and officials of companies	3	
Collectors, auctioneers, and agents	9	
Stenographers and typewriters	3	
Telegraph and telephone operators		1
Others of this class	16	2
Mercantile and trading:		
Apothecaries, pharmacists, etc.	3	
Commercial travelers	1	1
Merchants and dealers.	77	4
Hucksters and peddlers	5	5
Shopkeepers	26	56
Others of this class	20	17
Public entertainment:		
Hotel and boarding house keepers	1	
Saloon keepers, liquor dealers, bartenders, and restaurant keepers	2	
Personal service, police, and military:		
Barbers and hairdressers.	23	
Janitors and sextons.	12	
Policemen, watchmen, and detectives	15	
Soldiers, sailors, and marines	9	
Others of this class	15	
Laboring and servant:		
Laborers (not agricultural)	559	4
Launderers	17	160
Servants	97	35
Manufacturing and mechanical industry:		
Artificial flowers and paper box makers		
Bakers and confectioners	7	
Blacksmiths	9	1
Boot, shoe, and slipper makers	7	
Brewers, distillers, and rectifiers		
Butchers	5	2
Cabinet makers and upholsterers		
Carpenters and joiners	102	
Cigar makers and tobacco workers	50	64
Clock and watch repairers, jewelers, etc.	17	4
Compositors, printers, etc.	10	1
Coopers		
Embroiderers (gold, silk, etc.)		17
Engineers and firemen (not locomotive)	15	
Glass blowers and glass workers.		
Hat and cap makers	5	1
Leather makers		
Leather workers	2	
Machinists	23	
Marble and stone cutters	5	
Masons (brick and stone)	12	
Mill and factory operatives (textiles)		
Millers (flour and grist)		
Milliners		
Painters, glaziers, and varnishers	27	
Plumbers, gas and steam fitters	2	
Tailors, dressmakers, and seamsters.	40	201
Tinners and tinware makers	9	5
Others of this class	25	5
Agriculture, transportation, and other outdoor:		
Boatmen and canalmen	11	
Draymen, drivers, and teamsters	55	
Farmers, planters, and farm laborers	70	2
Gardeners, florists, nurserymen, etc.	7	1
Livery stable keepers and hostlers	2	
Lumbermen and raftmen	2	
Miners and quarrymen	1	
Sailors, pilots, fishermen, and oystermen	79	1
Steam railroad employees	2	
Stock raisers, herders, and drovers		
Others of this class	10	
All other occupations	131	44
Total	1,782	654
Grand total	2,436	

INFANT MORTALITY.

Causes of death.	Mother's milk.		Wet nurse.		Other milk.		No milk.		Mixed.		With- out food.		Not stated.		Total.
	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	
Abcess													1		1
Abcess of scalp and neck, resulting from scabies													1		1
Multiple, of the skin, with septicæmia.													1		1
Asphyxia neonatorum										3	1				4
Atelectasis:															
Congenital													2		2
Pulmonary													1		1
Athrepsia	1	5			33				1				5		45
Atrophy:															
Acute yellow of liver		2													2
Congenital													1		1
Infantile (Parrot athrepsia)					1										1
Banti's disease		1													1
Beriberi:															
Congenital; dilated right heart.													2		2
Infantile	57	707		2	2	57			10		7	57			899
Infantile; gastroenteritis.		1													1
Birth, premature.	3				1					17	17				38
Birth traumatism from normal delivery.												1			1
Bronchitis:															
Acute	9	275			1	86			8		3	41			423
Capillary		3				1						5			9
Catarrhal, acute												1			1
Chronic		44			25				6			6			81
Grippal		2													2
And enteritis.						1							2		3
And simple meningitis						1									1
Broncho-pneumonia	4	49			22				2		3	16			96
And suppurative meningitis												1			1
Burns, extensive											1				1
Cellulitis of neck and scalp												1			1
Cerebral congestion	1				1						2	3			7
Cerebral hæmorrhage and contusion (fracture of skull)													1		1
Cholelithiasis					1										1
Cholera, Asiatic		1			12				1		2	16			32
Cholera infantum:															
And beriberi, infantile													1		1
And enteritis, acute													1		1
Colibacillar fever.		6			1	1			6						14
Colitis													1		1
Acute ulcerative													1		1
Acute; broncho-pneumonia												1	1		2
Congenital debility	255	23			74	31	15		3	4	97	69	28		599
Congenital debility (bubonic plague).												1			1
And acute gastritis.													1		1
(Patulous foramen ovale)	1														1
Due to umbilical hernia												1			1
(Premature birth)											1				1
Congenital deficiency	1					1						2	2		6
Consumption						2									2
Convulsions:															
Of children	59	178	1		12	47	1		2		7	15			322
Of children (laryngo spasmus)						1									1
Infantile, from acute intestinal obstruction													1		1
Cyanosis											2				3
Diarrhoea and enteritis	1	9		1	5	22			1						41
Diphtheria													3		3
And broncho-pneumonia						3							1		1
Dyspepsia, gastrointestinal						7									8
Dysentery		5				1			4			5			21
Amœbic						1									1
Enteritis		16			1	41			4			6			68
Catarrhal broncho-pneumonia.													1		1
Enterocolitis					1	3						1	6		11
Enterorrhagia (anæmia)		1													1
Erysipelas	1	11											2		14
Furunculosis						1									1
Gastric indigestion, acute.													1		1
Gastritis						1									1
Gastroenteritis	1	18				30			3		6	12			70

Infant mortality—Continued.

Causes of death.	Mother's milk.		Wet nurse.		Other milk.		No milk.		Mixed.		Under 30 days without food.		Not stated.		Total.
	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	Under 30 days.	30 days to under 1 year.	
Gastrointestinal intoxication		1													1
Grippe		5													5
Hæmophilia neonatorum													2		2
Hæmorrhage:															
Into adrenals													2		2
Of the cord	3												2		5
Intestinal					1								2		1
Multiple, incident to birth													1		1
Subdural													1		1
Subdural; icterus													1		1
Umbilical	4												3		7
Hæmorrhagic disease (gastric form)													1		1
Heart, organic disease of		1											1		1
Hepatitis, acute		1													1
Hypermetrophy and dilatation of the heart															1
Icterus	9	1			1								3	1	15
Imperforate anus													2		2
Inanition					2									1	3
Infection about umbilicus and genital organs													1		1
Insufficient vitality													1		1
Intestinal occlusion					1								1		2
Intoxication from formalina														1	1
Malaria		1			1									1	3
Malnutrition	1	1			16				1				1	5	25
Marasmus		14			38				7				4		65
Marasmus; ileo-colitis and tracheo-bronchitis														1	1
Meningitis:															
Bacillar (nonepidemic form)															
Simple	1	64			23				2				2	15	108
Tuberculous		8			4								3		15
Nephritis:															
Acute		3		1	4									2	10
Chronic		5			5								3		13
Noma													1		1
Oedema of brain, acute parenchymatous nephritis (status lymphaticus)														1	1
Omphalitis	2														2
Otitis media suppurative, broncho-pneumonia; meningitis														1	1
Pemphigus		1												1	1
Pericarditis, acute														1	1
Peritonitis, acute														1	1
Pertussis and broncho-pneumonia														1	1
Pleurisy		1			2									1	3
Pneumonia	2	11			2										16
Pneumonia, tuberculous													1		1
Polio-myelitis					1									1	1
Postmortem decomposition (undetermined)		1												3	4
Prematurity; congenital debility; broncho-pneumonia													1		1
Pulmonary congestion					1									1	2
Purpura hæmorrhagica, septicæmia														1	1
Purulent infection					1										1
Rickets		1			2										3
Septicæmia	1			1	2									7	11
Spina bifida									1						1
Status thymicus									1						2
Syphilis, hereditary	1													2	3
Tetanus, infantile	79		1		1				1		1	12			96
Tuberculosis:															
Of the bones		1													1
Of the brain													1		1
Generalized															2
Pulmonary		2			1									5	8
Tuberculous mesentery														1	1
Uræmia (?)														1	1
Uræmic convulsions														1	1
Whooping cough		2													2
Total	497	1,482	2	4	104	539	17		4	64	119	169	324	3,325	

**COMPARATIVE MORTALITY FROM JANUARY, 1901, TO DECEMBER, 1914,
INCLUSIVE.**

Month.	1901		1902		1903		1904	
	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.
January	753	a 36.25	760	a 36.58	602	a 28.96	797	b 42.64
February	689	a 36.72	706	a 37.63	511	a 27.23	709	b 40.89
March	885	a 42.60	770	a 37.06	539	a 25.94	751	b 40.28
April	886	a 44.07	1,327	a 66.01	549	a 27.31	748	b 41.40
May	903	a 43.47	1,688	a 81.26	770	a 37.06	766	b 41.03
June	621	a 30.89	1,418	a 70.54	592	a 29.45	800	b 44.28
July	608	a 29.27	2,223	a 107.02	620	b 33.21	866	b 46.89
August	702	a 33.79	1,712	a 82.41	862	b 46.17	1,032	b 56.28
September	767	a 38.15	1,132	a 66.31	1,228	b 67.97	1,064	b 58.89
October	855	a 41.16	927	a 44.62	1,217	b 65.19	1,018	b 54.58
November	848	a 42.18	1,035	a 51.48	974	b 53.91	967	b 52.97
December	858	a 41.30	763	a 36.25	894	b 47.89	794	b 42.53
Total	9,375	a 38.30	14,451	a 59.04	9,358	b 40.27	10,301	b 46.83

Month.	1905		1906		1907		1908	
	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.
January	685	b 36.69	737	b 39.48	632	c 33.31	1,117	c 58.87
February	608	b 36.05	595	b 35.28	473	c 27.60	733	c 41.29
March	563	b 30.15	600	b 32.14	464	c 24.45	720	c 37.94
April	530	b 29.33	555	b 30.72	416	c 22.65	626	c 34.09
May	526	b 28.17	600	b 32.14	462	c 24.35	638	c 33.36
June	593	b 32.82	693	b 38.36	402	c 21.89	678	c 36.92
July	747	b 40.01	1,451	b 77.72	515	c 27.14	977	c 51.49
August	841	b 45.05	1,182	b 63.31	653	c 34.41	1,148	c 60.50
September	1,013	b 56.07	835	b 46.22	768	c 41.82	1,362	c 74.17
October	850	b 45.53	684	b 36.64	877	c 46.22	991	c 52.28
November	944	b 52.25	653	b 36.14	725	c 39.48	837	c 45.58
December	841	b 45.05	597	b 31.98	900	c 47.43	824	c 43.42
Total	8,741	b 39.74	9,182	b 41.74	7,287	c 32.59	10,646	c 47.62

Month.	1909		1910		1911		1912	
	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.
January	720	c 37.94	729	c 36.64	653	d 32.82	698	d 35.09
February	616	c 35.94	638	c 35.50	536	d 29.82	611	d 32.82
March	618	c 32.57	642	c 32.26	574	d 28.85	732	d 36.79
April	550	c 29.95	594	c 30.85	547	d 28.40	671	d 34.85
May	544	c 28.67	604	c 30.35	609	d 30.60	701	d 35.23
June	552	c 30.06	646	c 33.55	693	d 35.99	605	d 31.42
July	691	c 36.41	799	d 40.15	830	d 41.71	689	d 34.63
August	679	c 35.78	731	c 36.74	878	d 44.13	706	d 35.43
September	649	c 35.34	664	c 34.48	741	d 38.48	661	d 34.38
October	700	c 36.89	705	c 35.43	686	d 34.48	633	d 31.81
November	778	c 42.37	642	c 33.34	782	d 40.61	573	d 29.76
December	839	c 44.21	635	c 31.91	698	d 35.06	540	d 27.14
Total	7,936	c 35.50	8,029	c 34.25	8,227	d 35.09	7,819	d 33.35

a Death rate computed on population of 244,782 (Health Department's Census).

b Death rate computed on population of 219,941 (Official census, 1903).

c Death rate computed on population of 223,542 (Health census, 1907).

d Death rate computed on population of 234,409 (Health census, 1910).

Comparative mortality from January, 1901, to December, 1914, inclusive—
Continued.

Month.	1913		1914	
	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.
January	502	425.23	570	225.15
February	445	424.76	499	224.38
March	451	422.66	462	220.39
April	442	422.95	464	221.16
May	504	425.33	430	18.97
June	442	422.95	387	17.65
July	410	19.49	540	23.87
August	439	20.87	581	25.64
September	529	25.99	693	31.60
October	550	26.15	624	27.64
November	590	28.99	651	28.69
December	600	28.53	686	30.27
Total	5,904	23.82	6,587	24.67

^d Death rate computed on population of 234,409 (Health census, 1910).

^e Death rate computed on estimated population of 247,756.

^f Death rate computed on population of 266,943 (Health census, 1914).

MORTALITY COMPARED WITH SAME PERIOD OF PREVIOUS YEARS.

Year.	First quarter.		Second quarter.		Third quarter.		Fourth quarter.	
	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.	Deaths.	Annual death rate per 1,000.
1901	2,327	38.58	2,410	39.52	2,077	33.69	2,561	41.54
1902	2,236	37.07	4,483	72.70	5,067	82.19	2,715	44.04
1903	1,652	27.39	1,911	31.34	2,710	48.91	3,085	55.68
1904	2,256	41.16	2,314	42.22	2,962	53.46	2,769	49.98
1905	1,856	34.24	1,649	30.09	2,601	46.94	2,635	47.56
1906	1,932	35.64	1,848	33.72	3,468	62.59	1,934	34.90
1907	1,569	28.48	1,280	22.98	1,936	34.38	2,502	44.43
1908	2,570	43.14	1,937	34.77	3,487	61.92	2,652	47.09
1909	1,954	35.47	1,646	29.55	2,019	35.85	2,317	41.14
1910	2,009	34.78	1,844	31.67	2,194	37.15	1,982	33.56
1911	1,763	30.62	1,849	31.65	2,449	41.47	2,166	36.68
1912	2,041	34.94	1,977	33.85	2,055	34.80	1,746	29.57
1913	1,398	24.20	1,388	23.76	1,378	22.08	1,740	27.88
1914	1,531	23.27	1,281	19.26	1,814	26.97	1,961	29.16

CHOLERA AND PLAGUE, CITY OF MANILA.

Nationality.	Cholera.				Plague.			
	Cases.		Deaths.		Cases.		Deaths.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Americans	6		1					
Filipinos	288	173	150	111	12	4	10	4
Spaniards								
Other Europeans	3		2		10		8	
Chinese	3		4					
All others	17		5					
Total	317	173	162	111	22	4	18	4

Cholera and plague, city of Manila—Continued.

District and age.	Cholera		Plague.	
	Cases.	Deaths.	Cases.	Deaths.
Health districts:				
No. 1, Intramuros	83	41	3	3
No. 2, Meisic	138	59	16	12
No. 4, Sampaloc	67	43	4	4
No. 5, Tondo	157	106	3	3
No. 6, Paco	46	23		
Total	490	272	26	22
Ages:				
Under 1 year	29	26	1	1
1 year to 9 years	114	89	3	3
10 years to 19 years	72	25	10	9
20 years to 29 years	133	46	6	4
30 years to 39 years	74	38	3	4
40 years to 49 years	37	24	2	
Over 50 years	31	24	1	1
Unknown				
Total	490	272	26	22

Cases found alive: Cholera, 328; plague, 17.
 Cases found dead: Cholera, 167; plague, 9.

SMALLPOX CITY OF MANILA.

No cases of smallpox occurred during the period covered by this report.

Last case occurred February 14, 1910; last death occurred June 15, 1909.

VARICELLA, CITY OF MANILA.

A total of 293 cases of varicella occurred—18 Americans, 270 Filipinos, 1 Spaniard, 2 Chinese, and 2 others. No deaths.

TUBERCULOSIS CASES REPORTED IN THE CITY OF MANILA, DURING THE CALENDAR YEAR 1914.*

[Closed January 8, 1915.]

Nationality.	Health districts.										Total.
	No. 1.		No. 2.		No. 4.		No. 5.		No. 6.		
	Male.	Fe- male.	Male.	Fe- male.	Male.	Fe- male.	Male.	Fe- male.	Male.	Fe- male.	
Americans											
Filipinos	91	73	189	134	90	77	221	147	67	54	1,143
Spaniards					1	1					2
Other Europeans			1								1
Chinese			3		1						4
All others			1								1
Total	91	73	194	134	92	78	221	147	67	54	1,151

* Incomplete.

Also reported 198 males and 133 females, provincial cases; and 3 males and 3 females, permanent residence unknown.

RAT CAMPAIGN OPERATIONS.

Spring traps set	620,420
Rats caught with spring traps	79,189
Wire traps set	73,137
Rats caught with wire traps	1,750
Poison portions placed	68,039
Bait set (coconuts)	802,086
Rats found poisoned	1,230
Rats caught by dogs	1,108
Rats killed by clubs and other weapons	31,308
Rats found dead from other causes	3,697
Total rats caught, found poisoned, and found dead	118,282

REPORT OF PRESCRIPTIONS FILLED AT THE CENTRAL FREE DISPENSARY.

Health districts.	Americans.				Foreigners.			
	Adults.		Children.		Adults.		Children.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
No. 1, Intramuros	2,344	159		6	96			
No. 2, Meisic	55			1	1			
No. 4, Sampaloc	80				3			
No. 5, Tondo	46	1						
No. 6, Paco	6							
Total	2,531	160		7	100			

Health districts.	Filipinos.				Chinese.				Total.
	Adults.		Children.		Adults.		Children.		
	Male.	Fe- male.	Male.	Fe- male.	Male.	Fe- male.	Male.	Fe- male.	
No. 1, Intramuros	13,158	6,417	1,471	1,326	16				24,993
No. 2, Meisic	1,939	1,464	294	271	5				4,080
No. 4, Sampaloc	1,731	933	1,146	585					4,478
No. 5, Tondo	981	578	269	266					2,141
No. 6, Paco	82	63	19	24					194
Total	17,891	9,455	3,199	2,472	21				35,836

REPORT OF SICK AND WOUNDED POOR ATTENDED BY MUNICIPAL PHYSICIANS.

Health districts and physicians.	Americans.				Foreigners.				Filipinos.			
	Adults.		Children.		Adults.		Children.		Adults.		Children.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
No. 1, Intramuros, Dr. Cavanna					26	1			1,495	1,385	647	621
No. 2, Meisic, Drs. F. Herrera and C. Reyes	19		2		3				359	187	173	147
No. 4, Sampaloc, Dr. F. Castañeda	1				1				390	758	540	528
No. 5, Tondo, Drs. V. Pantoja and P. Gabriel	1				1				1,383	836	797	592
No. 6, Paco, Dr. J. B. Cabarrus			1						103	121	88	63
Dr. Tee Han Kee	2								76	72	28	31
Total	23		3		31	1			3,806	3,359	2,273	1,982

Health districts and physicians.	Chinese.					Cured.		Deaths.		Number of visits.
	Adults.		Child- ren.							
	Male.	Female.	Male.	Female.	Total.	Male.	Female.	Male.	Female.	
No. 1, Intramuros, Dr. Cavanna	3				4, 178	888	883	17	13	9, 501
No. 2, Meisic, Drs. F. Herrera and C. Reyes	20				910	474	271	3		4, 135
No. 4, Sampaloc, Dr. F. Castañeda					2, 218	108	146	26	48	2, 742
No. 5, Tondo, Drs. V. Pantoja and P. Gabriel	5				3, 615	626	243	1	2	8, 089
No. 6, Paco, Dr. J. B. Cabarrus	1				377	127	120	1	5	1, 005
Dr. Tee Han Kee	373	3	30	1	616	419	89			2, 292
Total	402	3	30	1	11, 914	2, 642	1, 752	48	68	27, 764

REPORT ON THE PHYSICAL DEFECTS IN SCHOOL CHILDREN.

Diseases found.	Boys.	Girls.	Disposition of cases.				Total.
			Ex- cluded.	Sent to dispensary.	No treat- ment.	Re- fused treat- ment.	
To be excluded:							
Pertussis							
Mumps	2		2	2			2
Tuberculosis	127	89	1	211	5		216
Measles							
Contagious eye cases, except trachoma							
Pediculosis with live pediculi	44	23	2	67			67
Scabies	49	27	1	76			76
Contagious skin cases							
Favus	19	6		25			25
Other communicable infectious diseases							
Varicella	1	3	3	2	2		4
Not to be excluded:							
Pediculosis, no live pediculi		22		22			22
Adenoids	182	12		167			194
Tonsils hypertrophied	280	65		218	127		345
Conjunctivitis, acute	381	103		453	1		454
Trachoma	78	13		91			91
Myopia	183	67		206	44		250
Other eye affections:							
Astigmatism	257	73		286	44		330
Blind	16	6		1	22		22
Blind one eye	18	5		1	22		23
Blepharitis	1			1			1
Cataract	3			3			3
Hordeolum	1	1		2			2
Hypermetropia	29	7		28	8		36
Iritis	7			7			7
Opacity cornea	19	5			24		24
Pterygium	16	3		9	10		19
Staphyloma	3				3		3
Strabismus	25	18		25	18		43
Ulcer cornea	1			1			1
Defects of hearing	683	177		823	37		860
Discharge from one ear	28	7		35			35
Discharge from both ears	5	2		7			7
Adenitis, tubercular	519	264		783			783
Tinea	1,409	410		1,759	80		1,819
Dental caries	2,366	1,528		1,076	2,814	5	3,894
Bodily deformities	69	18		16	71		87
Mental defects	3	9		1	11		12
Backward development	12	3		2	13		15
Other diseases:							
Adenitis	8	2		7	3		10
Anæmia	115	71		184	2		186
Appendicitis	1			1			1
Arthritis	9	6		15			15
Ascariasis	2			2			2
Asthma	4	2		6			6
Beriberi	8	2		10			10
Bronchitis	1,183	618		1,801			1,801
Chorea	4			4			4
Deaf	14	9			23		23
Dermoid cyst	3	2		1	4		1
Dysentery	1			1			1
Eczema	10	5		15			15
Epilepsy	3			3			3
Fracture	3			3			3
Ganglion	2			2			2
Gastritis	163	51		214			214
Glossitis	1			1			1
Goitre		1			1		1
Hemiplegia		1		1			1
Ichthyosis		1			1		1
Impetigo	2			2			2
Keloid	1			1			1
Laryngitis	8	1		9			9
Leucoderma	4	3		4	8		7
Lumbago	1			1			1
Malaria	4	3		7			7
Migraine	3			3			3
Myalgia	216	126		342			342
Nasal obstruction	1	1		2			2
Neuralgia		1		1			1
Otitis media	4	1		5			5
Palpitation	2			2			2
Pericarditis	2			2			2
Pharyngitis	21	5		26			26

Report on the physical defects in school children—Continued.

Diseases found.	Boys.	Girls.	Disposition of cases.				Total.
			Ex- cluded.	Sent to dispens- ary.	No treat- ment.	Re- fused. treat- ment.	
Not to be excluded—Continued.							
Other diseases—Continued.							
Pleurisy	83	12		95			95
Pompholyx	3	4		7			7
Psoriasis	1			1			1
Rhinitis	6			6			6
Synovitis	1			1			1
Tonsillitis	6	3		9			9
Torticollis	2			2			2
Tubercular adenitis	14	14		28			28
Tumors	1	1		2			2
Ulcers	22	6		28			28
Urticaria	1			1			1
Valvular lesions	6	3		8	1		9
Vertigo	9	5		14			14
Vaccinations required	49	65		3			114
Vaccinations made							
Total	8,813	3,991	9	9,287	3,401	5	12,604

Total number of children examined during 1914, 35,171.

CITY MORGUE REPORT.

Disposition.	Bodies.	Disposition.	Bodies.
Remaining from last year	35	Transferred to Government Museum (stillbirth)	1
Received	899	Transferred to private morgue	1
Total	934	Transferred to provinces	56
Buried by city	398	Remaining after the year	71
Buried by family	401	Total	934
Transferred to Army morgue	6		

DISPOSITION OF DEAD BODIES.

Buried:		Otherwise disposed of:	
Balicbalic cemetery	1,008	Cremated	35
Binondo cemetery	902	Preserved in alcohol (stillbirth)	1
Chinese cemetery	286	Remaining in Army morgue	3
Norte cemetery	4,904	Remaining in city morgue	71
Pandacan cemetery:		Remaining in private morgue	2
Filipino Church	117	Shipped to the United States	10
Roman Catholic	22	Transferred to Government Museum (stillbirth)	1
Santa Ana cemetery	114	Transferred to provinces	203
Singalong cemetery	765	Total	8,444

* Of this total, 35 from city morgue and 4 from private morgues, remaining from last year; 73 dead bodies brought from the provinces; and 521 were stillbirths.

DISINTERMENTS.

Cemetery.	Num- ber.	Cemetery.	Num- ber.
Balicbalic	9	Paco	106
Binondo	25	Santa Ana	5
Chinese	73	Santa Cruz	18
Loma	1	Tondo	2
Malate	2		
Maytubig	1	Total	256
Norte	14		

GENERAL INSPECTIONS OF HOUSES, PREMISES, VAULTS, ETC., WITH IMPROVEMENTS ORDERED, WHITEWASHED, CLEANED, ETC., BY MEDICAL INSPECTORS, SANITARY INSPECTORS, AND ASSISTANT SANITARY INSPECTORS.

1. Inspections of houses by sanitary inspectors	21,723
2. Reinspections of houses for verification of work ordered	4,276
3. Inspections of houses by assistant sanitary inspectors and sanitary policemen	483,149
4. Reinspections of houses by assistant sanitary inspectors and sanitary policemen	73,126
5. Houses ordered cleaned (written)	22
6. Houses ordered cleaned (verbal)	40,712
7. Houses cleaned	39,972
8. Houses ordered whitewashed and painted	114
9. Houses whitewashed and painted	113
11. Houses recommended condemned and removed	21
12. Houses condemned and removed	13
13. Localities where "squatters" are located	
14. Samples of water, foods, etc., sent to Laboratory	29,988
15. Reports for same	14,741
16. Fire plugs opened or closed for sanitary purposes	
17. Hydrants recommended reopened	
18. Houses where garbage has not been removed for two days	40
19. Persons reported sick to municipal physicians	17,324
20. Cesspools and vaults ordered cleaned	80
21. Cesspools cleaned	30
22. Yards ordered cleaned	36,540
23. Yards cleaned	35,027
24. Yards ordered repaired (repaved, etc.)	4
25. Yards repaired	19
26. Cholera cases reported by sanitary inspectors	196
27. Cholera cases found alive	542
28. Cholera cases found dead	190
29. Orders issued during the year	5,869
30. Orders complied with during the year	2,784
31. Orders awaiting action	405
32. Orders pending in court	
33. Average number of food tiendas in the districts	2,813
34. Persons convicted for violation of food prohibition orders	95
35. Average number of regular inspectors on duty	62
36. Average number of regular emergency inspectors on duty	23
37. Lepers sent to San Lazaro Hospital	110
38. Plague cases reported	26
39. Smallpox cases reported	

REPORT OF DISINFECTIONS.

Causes for disinfections.	Dis-infections.	Contacts.
Anthrax.....	1	2
Bubonic plague.....	121	281
Suspected.....	10	86
Chickenpox.....	2	12
Cholera.....	302	7,499
Cholera (?), plague (?).....	3	13
Cholera, suspected.....	194	2,664
Cholera vibrio carriers.....	498	2,717
Diphtheria.....	57	636
Diphtheria bacilli carrier.....	3	3
Diphtheria suspected.....	5	15
Dysentery, bacillary.....	6	18
Erysipelas.....	3	11
Gonorrhoea.....	1	
Grippe.....	2	8
Leprosy.....	106	276
Suspected.....	17	81
Measles.....	12	35
Meningitis, tuberculous.....	37	126
Mumps.....	6	10
Paratyphoid.....	1	5
Pneumonia.....	9	28
Puerperal septichæmia.....	4	19
Scarlet fever, suspected.....	1	1
Septichæmia.....	1	7
Tetanus.....	32	125
Tuberculosis.....	551	1,514
Tuberculous peritonitis.....	2	3
Typhoid fever.....	68	307
Suspected.....	1	
Typhus fever.....	1	6
Varicella.....	101	655
Suspected.....	1	
Varioloid.....	25	172
Whooping cough.....	3	24
Insanitary conditions.....	22,343	4,876
Total.....	24,530	22,235

REPORT OF ACTION TAKEN ON APPLICATIONS FOR LICENSES.

Approved.....	10,225
Disapproved.....	387
Total acted upon.....	10,562

GENERAL RETURN OF BIRTHS AND DEATHS (WITH CAUSES) IN THE VARIOUS PROVINCES OF THE PHILIPPINE ISLANDS DURING THE CALENDAR YEAR 1913.

Cause of death.	Abra.	Agu-san.	Albay.	Ambos Camarines.	Antique.	Bataan.	Batanes.
Typhoid fever.....	1	13	11	25	7	19	
Typhus fever.....	1		48	1	4	14	
Malarial fever.....	317	93	889	792	435	55	
Malarial cachexia.....	64	9	81	15	2	63	
Smallpox.....		9					
Measles.....		14	6	6	150		
Whooping cough.....	18	1	86	57	26	7	
Diphtheria and croup.....				17			
Asiatic cholera.....						2	
Dysentery.....	8	31	457	207	341	17	7
Leprosy.....					1	1	
Beriberi.....		5	86	77	1	29	
Tuberculosis of the lungs.....	135	12	563	600	400	107	11
Tuberculosis of other organs.....	1	8	96	63	27	6	
Cancer and other malignant tumors.....		2	13	11		5	1
Cerebral hæmorrhage, apoplexy.....	8	5	17	21	1	12	1
Convulsions of infants (under 5 years).....	9	39	781	534	67	347	6
Acute bronchitis.....	12	6	242	56	50	29	2
Diarrhœa and enteritis (under 2 years).....	2	14	89	59	87	10	1
Diarrhœa and enteritis (2 years and over).....	22	2	54	60	83	3	1
Diseases of the puerperal state.....	4	3	186	112	29	26	1
Violence:							
Suicide.....	2	1	6	16	4	3	
Not suicide.....	16	5	34	46	17	17	3
Homicide.....			3	1		1	
All other causes of death.....	214	122	2,642	1,534	568	715	126
Total.....	834	394	6,390	4,310	2,300	1,488	160
Males.....	433	232	3,345	2,284	1,211	771	74
Females.....	401	162	3,045	2,026	1,089	717	86
Annual death rate per 1,000.....	13.53	18.21	25.02	17.11	16.85	31.50	19.31
CLASSIFIED REPORT OF ALL DEATHS OCCURRING.							
Males:							
Married.....	134	56	689	610	219	146	19
Widowers.....	48	15	312	250	97	73	3
Divorced.....						1	
Single.....	16	32	364	325	99	60	17
Boys.....	234	128	1,953	1,093	771	491	36
Condition not stated.....	1	1	27	6	25		
Females:							
Married.....	126	35	690	531	218	146	14
Widows.....	76	25	441	325	148	80	22
Divorced.....					6		
Single.....	29	10	336	271	108	39	5
Girls.....	170	91	1,578	895	608	462	45
Condition not stated.....		1		4	1		
Causes of death.							
	Batanga.	Bohol.	Bulacan.	Cagayan.	Capiz.	Cavite.	Cebu.
Typhoid fever.....	117	25	49		27	20	220
Typhus fever.....	11	1			1	2	4
Malarial fever.....	422	236	419	486	837	265	615
Malarial cachexia.....	142		48	48	69	106	207
Smallpox.....					4	4	22
Measles.....	26	11	2	2	335	1	72
Whooping cough.....	81	132	5	14	121	15	233
Diphtheria and croup.....	14		2	10	8	1	2
Asiatic cholera.....			5		17	1	2
Dysentery.....	173	25	76	131	925	47	334
Leprosy.....				1			1
Beriberi.....	212	52	233	59	74	110	413
Tuberculosis of the lungs.....	626	238	799	289	427	282	640
Tuberculosis of other organs.....	26	46	46	53	43	20	253
Cancer and other malignant tumors.....	16	36	44	8	13	12	118
Cerebral hæmorrhage, apoplexy.....	38		39	10	10	28	36
Convulsions of infants (under 5 years).....	1,015	208	1,758	536	146	712	504
Acute bronchitis.....	288	30	133	61	35	75	114
Diarrhœa and enteritis (under 2 years).....	153	15	35	45	86	130	296
Diarrhœa and enteritis (2 years and over).....	123	8	56	39	62	138	207
Diseases of the puerperal state.....	137	71	105	55	63	63	152
Violence:							
Suicide.....	6	6	8	3	3	11	38
Not suicide.....	58	45	53	35	56	34	59
Homicide.....	10	1		6	5	4	16

General return of births and deaths, etc.—Continued.

Causes of death.	Batan- gas.	Bohol.	Bula- can.	Caga- yan.	Capiz.	Cavite.	Cebu.
All other causes of death	2,910	3,696	1,481	1,504	1,305	1,367	5,636
Total	6,554	4,882	5,396	3,395	4,672	3,448	10,194
Males	3,406	2,517	2,935	1,828	2,402	1,944	5,430
Females	3,148	2,365	2,461	1,567	2,270	1,504	4,764
Annual death rate per 1,000	20.80	18.13	23.90	23.63	24.14	25.07	15.13

CLASSIFIED REPORT OF ALL DEATHS
OCCURRING.

Males:							
Married	759	547	701	435	464	408	1,351
Widowers	222	182	261	192	198	194	394
Divorced							
Single	213	194	238	133	155	151	619
Boys	2,201	1,577	1,735	1,065	1,583	1,190	3,066
Condition not stated	11	17		3	2	6	
Females:							
Married	737	519	609	320	402	331	1,138
Widows	412	288	349	264	336	215	591
Divorced							
Single	201	317	158	89	188	77	653
Girls	1,798	1,235	1,345	890	1,343	881	2,382
Condition not stated		6		4	1		

Causes of death.	Ilocos Norte.	Ilocos Sur.	Iloilo.	Isabela.	La- guna.	Leyte.	Misa- mis.
Typhoid fever			36		90	184	214
Typhus fever					19	55	19
Malarial fever	746	776	476	235	408	871	708
Malarial cachexia			128	83	125	135	167
Smallpox						723	6
Measles			145		1	65	25
Whooping cough	38	32	144	9	11	569	175
Diphtheria and croup			73		6		
Asiatic cholera							
Dysentery	128	178	965	50	197	612	264
Leprosy		1	1	3	1	1	1
Beriberi	29	44	39	31	33	118	142
Tuberculosis of the lungs	396	385	1,325	151	247	571	285
Tuberculosis of other organs	1		74	1	479	330	69
Cancer and other malignant tumors		6	21	5	14	47	35
Cerebral hæmorrhage, apoplexy	1	6	31	4	30	10	4
Convulsions of infants (under 5 years)	306	334	1,616	171	968	455	415
Acute bronchitis		10	117	53	89	121	2
Diarrhoea and enteritis (under 2 years)	45	92	292	22	70	121	66
Diarrhoea and enteritis (2 years and over)	96	109	425	21	14	142	13
Diseases of the puerperal state	51	87	107	16	90	148	54
Violence:							
Suicide	27	17	10	5	7	113	10
Not suicide	9	11	53	12	26	83	27
Homicide			3	2	8	5	
All other causes of death	1,216	1,334	2,230	656	1,857	4,299	933
Total	3,089	3,422	8,311	1,538	4,790	9,773	3,619
Males	1,586	1,823	4,427	843	2,546	5,303	1,939
Females	1,503	1,599	3,884	695	2,242	4,470	1,680
Annual death rate per 1,000	17.68	20.01	19.78	20.96	32.03	19.17	27.29

CLASSIFIED REPORT OF ALL DEATHS
OCCURRING.

Males:							
Married	449	510	832	248	620	847	397
Widowers	163	157	414	80	209	323	108
Divorced							
Single	150	166	310	71	138	487	183
Boys	824	1,000	2,856	443	1,542	3,636	1,241
Condition not stated			15	1	39	9	10
Females:							
Married	390	440	689	183	570	765	389
Widows	252	210	533	98	351	420	133
Divorced							
Single	155	155	313	46	88	350	115
Girls	706	793	2,337	368	1,215	2,917	1,087
Condition not stated		1	12		18	8	6

General return of births and deaths, etc.—Continued.

Causes of death.	Nueva Ecija.	Nueva Vizcaya.	Occidental Negros.	Oriental Negros.	Pala-wan.	Pam-panga.	Panga-sinan.
Typhoid fever		15	44	20	1	46	140
Typhus fever	20	3	6	3			
Malarial fever	442	120	450	396	44	537	1,401
Malarial cachexia	96	46	79	19		156	290
Smallpox			13	1			
Measles			357	9		12	31
Whooping cough	11		32	90		3	32
Diphtheria and croup			99			1	
Asiatic cholera						11	
Dysentery	91	5	872	104	24	48	272
Leprosy							1
Beriberi		5	129	118	6	140	113
Tuberculosis of the lungs	486	60	852	259	30	702	1,456
Tuberculosis of other organs	21	6	80	96	3	18	164
Cancer and other malignant tumors	4		28	24		17	22
Cerebral hæmorrhage, apoplexy	1		15	2	1	26	51
Convulsions of infants (under 5 years)	719	112	876	161	32	1,527	2,222
Acute bronchitis	23	7	21	47	1	89	182
Diarrhoea and enteritis (under 2 years)	117		167	89	9	73	128
Diarrhoea and enteritis (2 years and over)	127	9	177	35	6	106	131
Diseases of the puerperal state	90	23	79	55	5	117	230
Violence:							
Suicide	4		6	17	1	3	2
Not suicide	16	8	70	29	6	44	112
Homicide	6		2	19	1		19
All other causes of death	1,247	265	2,493	1,563	115	1,961	4,388
Total	3,521	684	6,947	3,156	285	5,627	11,387
Males	1,891	390	3,872	1,695	150	2,994	6,069
Females	1,630	294	3,075	1,461	135	2,633	5,318
Annual death rate per 1,000	26.47	31.08	22.80	17.06	13.28	24.99	25.77

CLASSIFIED REPORT OF ALL DEATHS OCCURRING.

Males:							
Married	429	152	780	377	35	587	1,533
Widowers	157	28	366	183	10	242	575
Divorced							
Single	136	37	349	197	11	212	415
Boys	1,067	172	2,310	935	82	1,953	3,543
Condition not stated	102	1	117	3	12		3
Females:							
Married	375	87	633	337	27	607	1,413
Widows	233	48	399	226	26	319	780
Divorced							
Single	88	29	188	194	21	132	290
Girls	883	127	1,810	698	60	1,573	2,833
Condition not stated	51	3	45	6	1	2	2

Causes of death.	Rizal.	Rom-blon.	Suri-gao.	Tarlac.	Taya-bas.	Union.	Zam-bales.
Typhoid fever	31	44		35	133	35	5
Typhus fever	3	1		1	28	3	2
Malarial fever	155	134	34	196	626	256	87
Malarial cachexia	79	16	2	67	131	106	12
Smallpox			39		1	1	
Measles	4	16	28	9	5		8
Whooping cough	22	1	14	44	24	26	7
Diphtheria and croup	1	1			2		4
Asiatic cholera	38						
Dysentery	24	331	194	90	191	87	106
Leprosy					1		
Beriberi	236	28	4	103	254	31	14
Tuberculosis of the lungs	443	94	71	425	660	149	192
Tuberculosis of other organs	109	8	27	20	49	30	71
Cancer and other malignant tumors	35	7	2	2	29	13	3
Cerebral hæmorrhage, apoplexy	47	4	4	27	50	10	2
Convulsions of infants (under 5 years)	1,162	9	19	781	416	396	293
Acute bronchitis	170	31	11	85	134	97	3
Diarrhoea and enteritis (under 2 years)	116	11	14	37	93	17	29
Diarrhoea and enteritis (2 years and over)	107	20	11	56	86	24	34
Diseases of the puerperal state	67	32	32	73	105	39	22
Violence:							
Suicide	11	5	4	4	12	5	2
Not suicide	40	9	5	31	48	22	14
Homicide	3			1	11	5	

General return of births and deaths, etc.—Continued.

Causes of death.	Rizal.	Rom- blon.	Suri- gao.	Tariac.	Taya- bas.	Union.	Zam- bales.
All other causes of death	1,699	754	838	1,316	2,089	1,066	666
Total	4,602	1,556	1,353	3,408	5,128	2,418	1,576
Males	2,460	822	727	1,856	2,774	1,318	841
Females	2,142	734	626	1,547	2,354	1,100	735
Annual death rate per 1,000	30.25	26.98	16.11	24.31	25.39	18.28	27.41
CLASSIFIED REPORT OF ALL DEATHS OCCURRING.							
Males:							
Married	578	179	160	385	794	300	169
Widowers	191	79	47	181	220	105	78
Divorced					5		
Single	130	95	76	109	293	72	51
Boys	1,534	465	444	1,181	1,427	840	536
Condition not stated	27	4			35	1	7
Females:							
Married	484	149	141	336	677	235	166
Widows	343	114	62	187	347	146	115
Divorced	2				2		
Single	90	72	48	68	175	80	37
Girls	1,207	396	375	956	1,063	639	416
Condition not stated	16	3			70		1

CHOLERA IN THE PROVINCES.

[Closed February 3, 1915.]

Towns and provinces.	Cases.	Deaths.	Mortal- ity.
Amburayan: San Gabriel	5	3	Per of. 60.00
Bataan:			
Balanga	2	1	
Bagumbayan or Dinalupihan	8	5	
Orani	1	1	
Orion	19	15	
Total	30	22	73.33
Batangas: Bolbok	9	5	55.55
Bulacan:			
Baliwag	5	4	
Bocaue	3	1	
Bulacan	29	23	
Calumpit	12	6	
Hagonoy	188	117	
Malolos	74	58	
Meycawayan	7	4	
Obando	16	15	
Paombong	88	33	
Polo	11	11	
Pulilan	1	1	
Quingwa	3	2	
San Miguel de Mayumo	1	1	
Total	388	276	71.13
Cagayan: Aparri	3	2	66.66
Capiz:			
Banga	36	28	
Calivo	16	15	
Capiz	57	44	
Dao	25	18	
Dumalag	1	1	
Iuisan	27	16	
Jamindan	13	8	
Lezo	28	27	
Luctugan	2	2	
Libacao	4	3	
Mambusao	42	29	
New Washington	32	26	
Panay	50	40	

Cholera in the provinces—Continued.

Towns and provinces.	Cases.	Deaths.	Mortal-ity.
Capiz—Continued.			<i>Per ct.</i>
Panitan	21	18	
Pilar	25	25	
Pontevedra	41	25	
Sapian	23	15	
Sigma	16	11	
Tabok	1	1	
Total	460	356	77.39
Cavite:			
Bacoar	11	10	
Carmona	16	14	
Cavite	16	12	
Imus	12	7	
Kawit	8	5	
Noveleta	5	3	
Rosario	21	18	
Salinas	6	5	
Silang	3	3	
Santa Cruz	2	1	
Tanza	1	1	
Total	101	79	78.21
Ilocos Sur:			
Caoayan	9	7	
Candon	1		
Narvacan	8	6	
Santa	40	29	
Santa Cruz	5	6	
Sevilla	3	2	
Total	66	50	75.75
Iloilo:			
Iloilo	2		
Laguna:			
Alaminos	2	1	
Bay	18	15	
Bihang	35	26	
Cavinti	2	2	
Cabuyao	16	12	
Calamba	32	29	
Calawang	5	3	
Lilio	1	1	
Majayjay	12	8	
Magdalena	1		
Nagcarlan	3	3	
Pangil	1		
Pila	4	4	
Pagsanjan	1	1	
San Pablo	2	2	
San Pedro Tunasan	14	11	
Santa Cruz	43	32	
Santa Rosa	41	30	
Total	233	180	77.25
Mindoro:			
Bungabong	19	11	
Cawayan	20	11	
Dayhagan	13	5	
Paglasan	5	3	
Pinamalayan	28	13	
Total	85	43	50.58
Mountain Province: Tagudin	27	22	81.48
Pampanga:			
Angeles	2	3	
Apalit	12	9	
Bacolor	42	35	
Florida Blanca	1	1	
Guagua	43	35	
Lubao	8	7	
Macabebe	64	40	
Masantol	57	44	
Mexico	14	10	
Minalin	27	19	

Cholera in the provinces—Continued.

Towns and provinces.	Cases.	Deaths.	Mortal- ity.
Pampanga—Continued.			<i>Per ct.</i>
San Fernando.....	51	36	
San Simon.....	2	1	
Santa Ana.....	1	2	
Santa Rita.....	8	4	
Sexmoan.....	21	17	
Total.....	353	263	74.50
Pangasinan:			
Alaminos.....	14	9	
Binalonan.....	4	3	
Calasiao.....	4	4	
Dagupan.....	51	33	
Lingayen.....	5	5	
Mansoag.....	2	1	
Mangaldan.....	100	74	
Mapandan.....	1	1	
San Carlos.....	1	1	
San Fabian.....	68	37	
San Jacinto.....	16	13	
Total.....	266	181	68.04
Rizal:			
Binangonan.....	1	1	
Caloocan.....	10	6	
Fort William McKinley.....	2	1	
Jalajala.....	18	13	
Las Pinas.....	1		
Malabon.....	38	19	
Morong.....	41	27	
Navotas.....	54	44	
Paranaque.....	12	9	
Pasay.....	26	2	
Pasig.....	28	21	
Pateros.....	23	16	
San Juan del Monte.....	1		
San Mateo.....	1	1	
San Pedro Macati.....	6	2	
Taguig.....	13	10	
Total.....	275	172	62.54
Tayabas:			
Atimonan.....	3	3	
Luban.....	2		
Total.....	5	3	60.00
Union:			
Agoo.....	57	42	
Aringay.....	94	67	
Bacnotan.....	70	51	
Balaogan.....	12	3	
Bangar.....	61	37	
Bauang.....	55	36	
Caba.....	23	13	
Luna.....	56	44	
Naguilian.....	32	25	
Rosario.....	10	6	
San Fernando.....	81	63	
San Juan.....	60	42	
Santo Tomas.....	78	62	
Tubao.....	16	12	
Total.....	705	508	72.06

SUMMARY OF CHOLERA IN THE PROVINCES.

[Closed February 3, 1915.]

Provinces.	Cases.	Deaths.	Mortality.
			<i>Per ct.</i>
Amburayan.....	5	3	60.00
Bataan.....	30	22	73.33
Batangas.....	9	5	55.55
Bulacan.....	388	276	71.13
Cagayan.....	3	2	66.66
Capiz.....	460	356	77.39
Cavite.....	101	79	78.21
Ilocos Sur.....	66	50	75.75
Iloilo.....	2		
Laguna.....	233	180	77.25
Mindoro.....	85	43	50.58
Mountain.....	27	22	81.48
Pampanga.....	353	263	74.50
Pangasinan.....	266	181	68.04
Rizal.....	275	172	62.54
Tayabas.....	5	3	60.00
Union.....	706	508	72.06
Total and average.....	3,013	2,165	71.85

PROVINCIAL DATA REPORTED.

Provinces.	Barrios with improved water supply.	Artesian wells.	Opened during year.	Total in operation.	New sanitary market buildings.	Municipalities providing sanitary disposition of human excreta.	Cemeteries.	Free dispensaries conducted.	Total number of patients treated.	Quinine doses or tablets distributed.	Improved slaughter-houses built.	Sanitary divisions organized.	Health officers.	Sanitary inspectors.	Other employees.
							Opened. Good condition. Closed.								
Agusan.....		6			1			1	240	40,350					
Albay.....		5	9		5							8	8	16	3
Amboas Camarines.....					3			1	1,740				2	7	3
Antique.....	(a)						3 3	1	71			3	3		
Bataan.....															
Batanes.....															
Batangas.....			54		2		1								
Bohol.....	23	10	43		4		9	1	1,600		4	6	6	35	
Bulacan.....			173		11		3	1	344						
Cagayan.....						6	10						1	9	
Capiz.....	1				1										
Cavite.....	(a)														
Cebu.....	1						11	2	2,410			8	8	52	
Ilocos Norte.....															
Ilocos Sur.....	1				1		42				2		15		2
Iloilo.....						1									
Isabela.....															
Laguna.....	b 1					b 2									
La Union.....		1													
Leyte.....			3	3		5	2	1	1			12	12	41	
Misamis.....	2	1				b 10		15	1,014			1			
Mountain.....	2		3			5		5					6		
Nueva Ecija.....															
Nueva Vizcaya.....	3	5						1	2,131						
Negros Occidental.....			17	1		13		2				4	4		
Negros Oriental.....							1					1			
Palawan.....								4	600						
Pampanga.....			242		8	b 1						2			
Pangasinan.....					2	1									
Rizal.....			38	2							1				
Romblon.....	2					1									
Samar.....															
Sorsogon and Masbate.....	6		13	3									9		
Surigao.....						1		1							
Tarlac.....	12		55	6		b 3			233						
Tayabas.....	2					(c)		27	1,111	169,500		8	8	32	
Zambales.....					1	d 10	2		102				9	13	

a Bataan and Cavite included with Rizal.

b Ordinances approved.

c Almost all municipalities. Definite number not stated.

d Various methods used in different barrios some improvement shown.

**REPORTS RECEIVED OF BLIND PERSONS LIVING IN THE VARIOUS PROVINCES
OF THE PHILIPPINE ISLANDS.**

Provinces.	Race.	Children.		Single.		Married.		Widowed.		Total.		
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.			
Abra	Filipino.	23	21			9	3	10	8	4	10	44
Agusan.	do	14	7	3	1	8	4	3	2			31
Albay	do	130	92	11	7	73	53	38	11	8	21	232
Ambos Camarines	do	79	48	7	5	25	23	26	8	21	17	127
Antique	do	56	53	4	9	22	20	16	9	14	15	109
Bataan	do	31	19		1	14	11	12	1	5	6	50
Batanes	do	18	37		1	2	11	11	11	5	14	55
Batanes	do	18	37		1	2	11	11	11	5	14	55
Batangas.	do	101	78	8	4	43	38	38	20	12	16	179
Bohol	do	151	110	11	3	77	73	49	19	14	15	261
Bulacan	do	48	45	1	5	23	21	12	6	7	13	98
Cagayan	do	64	56	9	1	25	29	24	7	6	19	130
Capiz.	do	83	89	3	3	29	30	34	24	17	32	172
Cavite	do	66	63	11	7	26	25	23	15	6	16	139
Cebu	do	83	54	3	19	44	26	21	9	15		137
Ilocos Norte	do	46	56	2	3	10	20	27	8	7	25	102
Ilocos Sur	do	80	69	10	7	35	27	24	15	11	20	149
Iloilo	do	140	122	6	3	65	55	47	23	22	41	262
Isabela	do	29	22			5	6	15	7	9	9	51
Laguna	do	55	44	10	7	25	17	15	6	5	14	99
Leyte	do	177	76	21	6	104	42	38	11	14	17	253
Misamis	do	88	61	6	4	39	20	34	21	9	16	149
Nueva Ecija.	do	52	38	6	2	17	11	20	6	9	19	90
Nueva Vizcaya	do	19	11	3	1	7	2	6	3	3	5	30
Occidental Negros	do	102	63	7	3	57	35	18	12	20	13	165
Oriental Negros.	do	88	59	3	2	48	26	26	12	11	19	147
Palawan.	do	1	1			1	1					2
Pampanga	do	174	117	14	11	68	47	66	28	26	31	291
Pangasinan	do	141	115	22	14	55	42	47	34	17	25	256
Rizal	do	82	60	3	5	27	24	38	16	14	15	142
Romblon.	do	20	11	4	4	12	7	3				31
Samar	do	137	86	18	11	81	49	26	12	12	14	228
Surigao	do	24	3	2		9	2	11		2	1	27
Tarlac	do	50	51	8	7	10	15	21	12	11	17	101
Tayabas	do	84	45	12	8	40	21	26	6	6	10	123
Union	do	36	33	5	2	12	9	13	6	6	16	66
Zambales	do	32	26	1	1	14	9	11	5	6	11	58
Total		2,604	1,941	234	167	1,166	854	849	388	355	532	4,546

**REPORTS RECEIVED OF INSANE PERSONS LIVING IN THE VARIOUS PROVINCES
OF THE PHILIPPINE ISLANDS AND IN HOSPITALS.**

Provinces and hospitals.	Race.	Males.	Females.	Children.		Single.		Married.		Widowed.		Total.
				Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
Abra	Filipino	33	28	2	2	19	10	10	11	2	5	61
Agusan	do	10	10			6	2	4	5		3	20
Albay	do	48	48			38	30	6	9	4	9	96
Ambos Camarines	do	48	40		1	31	23	10	7	7	9	88
Antique	do	58	45			38	24	15	15	5	6	103
Bataan	do	18	11			11	3	5	4	2	4	29
Batanes	do	14	9			11	9	1		2		23
Batangas	do	54	43			35	27	15	5	4	11	97
Bohol	do	260	190	7	1	195	148	48	33	10	8	450
Bulacan	do	34	31		1	25	12	6	10	3	8	65
Cagayan	do	26	22	1		13	9	6	11	6	2	48
Capiz	do	56	73			32	32	19	21	5	20	129
Cavite	do	40	38			24	13	7	14	9	11	78
Cebu	do	211	132	1		176	107	28	19	6	6	343
Hospicio de San Jose:												
Manila	(a)	40	35									75
Cavite Sanatorium	(b)											326
Ilocos Norte	Filipino	72	36		1	50	20	20	10	2	5	108
Ilocos Sur	do	96	53	1		67	36	20	11	8	6	149
Iloilo	do	77	63	1	1	56	35	17	13	3	14	140
Isabela	do	8	7			2	4	6	3			15
Laguna	do	35	35			23	11	9	11	3	13	70
Leyte	do	102	57	3		66	29	29	17	4	11	159
Misamis	do	85	51	6		59	35	14	8	6	8	136
Nueva Ecija	do	29	23			24	12	4	8	1	3	52
Nueva Vizcaya	do	13	13	1	2	8	6	3	2	1	3	26
Occidental Negros	do	41	32	1		26	12	7	11	7	9	73
Oriental Negros	do	109	54		1	84	39	18	10	7	4	163
Palawan	do	7	6			5	2		4	2		13
Pampanga	do	24	32			16	13	6	12	2	7	56
Pangasinan	do	140	103	4	6	67	40	51	33	18	24	243
Rizal	do	40	28			26	13	10	11	4	4	68
Romblon	do	7	3			4	1	1	1	2	1	10
Samar	do	108	57	7	3	77	36	15	13	4	5	160
San Lazaro Hospital	(c)	248	48	1	1	124	16	103	21	20	10	296
Surigao	Filipino	11	2			6		3	2	2		13
Tarlac	do	7	3			1	3	6				10
Tayabas	do	127	100	5	7	99	67	15	21	8	5	227
Union	do	39	33		2	16	21	19	6	4	4	72
Zambales	do	15	19	2		10	9	3	7		3	34
Total		2,385	1,613	43	29	1,570	909	559	399	173	241	4,324

^a Europeans, 6; Filipinos, 69; total, 75.

^b Race not stated.

^c Americans, 9; Filipinos, 274; Europeans, 3; Chinese, 7; others, 3; total, 296.

REPORT OF HOSPICIO DE SAN JOSE, INSANE DEPARTMENT.

In hospicio January 1, 1914	315
Admitted	259
Discharged	135
Died	38
Remaining at the end of December, 1914	401

REPORT ON THE PHYSICAL DEFECTS IN SCHOOL CHILDREN IN THE PROVINCES.

Diseases found.	Disposition of cases.					Total.
	Boys.	Girls.	Ex-cluded.	Treated.	No treatment.	
To be excluded:						
Mumps		2	1			2
Measles		1	1			1
Pediculosis with live pediculi	5	218	214	223	1	223
Scabies	374	237	347	593	7	611
Contagious skin cases	16	20	35	36		36
Other communicable infectious diseases	1		1		1	1
Not to be excluded:						
Pediculosis, no live pediculi		17	11	17		17
Adenoids	15	21		11	25	36
Tonsils, hypertrophied	62	79		125	15	141
Conjunctivitis, acute	11	3		13	1	14
Trachoma		1		1		1
Myopia	8	9	2	6	6	17
Other eye affections	11	4		7	8	15
Defects of hearing	5	3		5		8
Discharge from one ear	4	2		4	2	6
Discharge from both ears	3	1			4	4
Adenitis, tubercular	4	2		6		6
Tinea	5	4		9		9
Dental caries	108	81		108	80	189
Bodily deformities	2	2		1	3	4
Backward development		1			1	1
Other diseases	94	49		130	3	143
Total	728	757	612	1,296	159	1,486

REPORT OF SERA.

	Bottles.	Units.
On hand at the beginning of year	99	
Received from the Bureau of Science		4,141,406
Total to be accounted for	99	4,141,406
Issued		4,141,406
Remaining at end of the year	99	

AMOUNT OF VACCINE VIRUS DISTRIBUTED BY THE BUREAU OF HEALTH.

	Units.
Amount on hand Jan. 1, 1914	29,500
Received from the Bureau of Science	2,577,400
Total to be accounted for	2,606,900
Distributed as per itemized statement	2,589,350
Remaining on hand Dec. 31, 1914	17,550

PLACES AT WHICH VACCINE VIRUS WAS DISTRIBUTED.

Provinces:	Units.	Provinces—Continued.	Units.
Albay	126,750	Pampanga	51,000
Ambos Camarines	62,100	Pangasinan	104,000
Baguio Hospital Division	1,100	Rizal	20,900
Bataan	7,800	Romblon	11,650
Batangas	85,000	Samar	184,200
Benguet	400	Sorsogon	35,500
Bulacan	77,400	Surigao	40,800
Cagayan	16,000	Tarlac	13,100
Capiz	1,000	Tayabas	63,850
Cavite	15,150	Union	39,550
Cebu	1,060,000	Zambales	10,400
Cullion leper colony	1,200		
Ilocos Norte	11,100	Total	2,421,350
Ilocos Sur	4,400		
Iloilo	120,000	Manila:	
Laguna	40,500	Bureau of Customs	150
Leyte	180,000	Health districts	147,500
Masbate	17,000	Other institutions	20,350
Mindanao	100		
Mindoro	7,000	Total	168,000
Nueva Ecija	24,600		
Nueva Vizcaya	7,600	Grand total	2,589,350
Palawan	1,200		

VACCINATIONS. CALENDAR YEAR 1914.

[Closed January 11, 1915.]

	Vaccina- tions.	Inspec- tions.	Positive.	Nega- tive.
<i>City of Manila.</i>				
Health district:				
No. 1, Intramuros	11,791			
No. 2, Meisic	29,956	8,384	6,287	2,097
No. 4, Sampaloc	17,190	10,988	6,671	4,317
No. 5, Tondo	9,078	4,028	2,792	1,286
No. 6, Paco	11,625	5,102	3,165	1,937
Total	79,640	28,502	18,915	9,587
<i>Provinces.</i>				
Agusan	7,008	3,951	2,638	1,313
Albay	92,545	63,046	49,989	13,067
Ambos Camarines	50,797	28,221	19,378	8,843
Bataan	3,856	3,786	2,717	1,069
Batangas	114,763	80,858	48,618	32,240
Benguet	1,311	724	584	140
Bohol	174,430	148,892	72,654	76,238
Bukidnon	5,944	1,843	1,041	802
Cagayan	7,768			
Capiz	7,227	4,737	3,493	1,244
Cavite	9,667	8,653	6,723	1,930
Cebu	406,033	117,440	75,099	42,350
Isabela	2,607			
Laguna	37,689	29,230	20,895	8,335
Leyte	40,129	19,173	9,394	9,779
Mindoro	187	187	93	94
Misamis	41,570	31,150	17,039	14,111
Mountain	451	807	750	57
Nueva Ecija	13,890	8,831	6,525	2,306
Nueva Vizcaya	5,319	5,319	3,704	1,615
Occidental Negros	17,337	8,506	5,571	2,935
Oriental Negros	18,970	13,324	8,361	4,963
Palawan	630	384	283	101
Pampanga	43,456	36,807	24,636	12,171
Pangasinan	91,804	80,088	54,590	25,498
Rizal	12,343	11,258	6,769	4,489
Samar	108,888	38,003	23,025	14,978
Sorsogon	6,952	669	334	335
Surigao	56,759	23,105	9,142	13,963
Tarlac	12,845	12,210	9,619	2,591
Tayabas	43,395	42,040	22,695	19,345
Union	24,703	19,867	11,623	8,234
Total	1,461,273	843,099	517,973	325,126
Grand total	1,540,913	871,601	536,888	334,713

RETURNS OF VACCINATIONS FOR THE PROVINCES WHERE SYSTEMATIC VACCI-
NATIONS WERE YET UNCOMPLETED DURING THE FISCAL YEAR 1914.

[Closed January 12, 1915.]

Province.	Period.		Vaccina- tions.	Inspec- tions.	Suc- cessful vac- cina- tions.	Unsuc- cessful vac- cina- tions.	Aver- age vacci- nations per 1,000 popu- lation.
	From—	To—					
Leyte	May 1, 1910	Nov. 30, 1914	736,494	322,732	222,507	115,402	1,893.68

MORTALITY AMONG GOVERNMENT EMPLOYEES.

	Amer- icans.	Filipi- nos.
Average number of employees	2,200	7,635
Deaths reported:		
From illness		34
From violence	4	3
Total	9	37
Deaths from illness:		
Average years of service	4.42	6.28
Average age at death	38.66	31.26
Annual death rate per 1,000	1.81	4.45
Deaths from violence:		
Average years of service	6.73	5.41
Average age at death	35.26	33.80
Annual death rate per 1,000	2.27	.39
Total deaths:		
Average years of service	5.98	6.18
Average age at death	39.34	33.26
Annual death rate per 1,000	4.09	4.84
Both nationalities:		
Population		9,835
Deaths		46
Average years of service		6.06
Average age at death		33.01
Annual death rate per 1,000		4.67

BAGUIO HOSPITAL DIVISION.

HOSPITAL CASES.

Diseases.	Remaining at last report.	Admitted.	Died.	Transferred.	Discharged.	Escaped.	Remaining.
1. Typhoid fever		9	2		6		1
4. Malaria	1	66	2		64		1
6. Measles		17			17		
10. Influenza		18			18		
14. Dysentery		29	5		23		1
19. Other epidemic diseases		20			20		
24. Tetanus		1	1				
28. Tuberculosis of the lungs	1	20			14		7
31. Abdominal tuberculosis		2			1		1
35. Disseminated tuberculosis		1	1				
37b. Syphilis, secondary		6			6		
37c. Syphilis, tertiary		9			8		1
38a. Soft chancre		3			3		
38b. Gonococcus infection		10			10		
42. Cancer and other malignant tumors of the female genital organs		2			2		
44. Cancer and other malignant tumors of the skin	1	1			1		
45. Cancer and other malignant tumors of other organs or of organs not specified		1					1
46. Other tumors (tumors of the female genital organs excepted)		3			3		
47. Acute articular rheumatism		11			10		1
55. Other general diseases		1	1				
56. Alcoholism (acute or chronic)		6			6		
61. Simple meningitis		1	1				
64. Cerebral hæmorrhage, apoplexy		2			1		1
66. Paralysis without specified cause	2				2		
69. Epilepsy		1			1		
73a. Hysteria		3			3		
73b. Neuralgia and neuritis		1			1		
74. Other diseases of the nervous system	1	10			11		
75. Diseases of the eyes and their annexa		4			4		
76. Diseases of the ears		1			1		
77. Pericarditis		2			2		
79. Organic diseases of the heart		11	3		7		1
81. Diseases of the arteries, atheroma, aneurysm, etc.		1			1		
83. Diseases of the veins (varices, hæmorrhoids, phle- bitis, etc.)		6			6		
84. Diseases of the lymphatic system (lymphangitis, etc.)		4			4		

Baguio Hospital Division—Continued.

HOSPITAL CASES—Continued.

Diseases.	Remaining at last report.	Admitted.	Died.	Transferred.	Discharged.	Escaped.	Remaining.
85. Hæmorrhage; other diseases of the circulatory system		1	1				
86. Diseases of the nasal fossæ		5			5		
87. Diseases of the larynx		2			2		
89. Acute bronchitis		35			35		
90. Chronic bronchitis		1			1		
91. Bronchopneumonia		16	1		14		1
92. Pneumonia	1	21	12		10		
93. Pleurisy		2			7		
96. Asthma		2			2		
98. Other diseases of the respiratory system (tuberculosis excepted)		1			1		
99. Diseases of the mouth and annexa		1	1		1		
100. Diseases of the pharynx		5			5		
103. Other diseases of the stomach (cancer excepted)		39			38		1
104. Diarrhea and enteritis (under 2 years)		3			3		
105. Diarrhea and enteritis (2 years and over)		13			13		
107. Intestinal parasites		23			23		
108. Appendicitis and typhlitis		5			5		
110a. Diseases of the anus and fæcal fistulas		5	1		4		
110b. Other diseases of the intestines		12			12		
115. Other diseases of the liver		3	1		2		
117. Simple peritonitis (nonpuerperal)		1	1				
119. Acute nephritis		2			2		
120. Bright's disease		7	2		5		
122. Other diseases of the kidneys and annexa		2			2		
123. Calculi of the urinary passages		1			1		
124. Diseases of the bladder	2	8			10		
127. Nonvenereal diseases of the male genital organs		4			3		1
130. Other diseases of the uterus		1			1		
132. Salpingitis and other diseases of the female genital organs		4			4		
134a. Normal labor		37			37		
134b. Accidents of pregnancy		7			7		
135. Puerperal hæmorrhage		1			1		
136. Other accidents of labor		7			7		
137. Puerperal septichæmia		5	2		3		
138. Puerperal albuminuria and convulsions		4	3		1		
141. Puerperal diseases of the breast		2			2		
143. Furuncle		3			3		
144. Acute abscess		27			27		
145a. Trichophytosis (tineas and peladas)		2			2		
145b. Scabies		9			9		
145c. Other diseases of the skin and annexa	1	8	1		8		
146. Diseases of the bones (tuberculosis excepted)		2			2		
147. Diseases of the joints (tuberculosis and rheumatism excepted)		3			3		
150. Congenital malformations (stillbirths not included)		3			3		
151a. Nuralings discharged from hospital without diseases		37			37		
151b. Congenital debility, icterus, and sclerema		3	2		1		
155. Suicide by poison		1			1		
155b. Other acute poisonings		1			1		
157. Burns (conflagration excepted)	1	12	1		12		
171. Traumatism by cutting or piercing instruments		23			22		1
172. Traumatism by fall		7	1		6		
175. Traumatism by other crushings (vehicles, railways, landslides, etc.)	2	61	5		57		1
176. Injuries by animals		1			1		
183. Homicide by cutting or piercing instruments		2			2		
184. Homicide by other means		1			1		
185a. Dislocations		2			2		
185b. Sprains	1	2			3		
185c. Fractures (cause not specified)	2	15	3		14		
186. Other external violence		20			20		
189a. Cause of death not specified or ill-defined		2	2				
189b. No disease, feigned disease	1	10			10		1
Total		16	833	55	772		22

Patients treated in the outdoor department at the Baguio Hospital Division, 3,233.

Baguio Hospital Division—Continued.

MISCELLANEOUS SUMMARY.

Patients remaining from fiscal year 1913.....	13
Patients admitted January 1 to December 31, 1914.....	739
Total hospital cases during 1914.....	752
Patients remaining in hospital December 31, 1914.....	19
Persons accompanying patients in hospital.....	44
Visits to hospital clinic.....	7,809
Patients attending hospital clinic.....	3,233
Surgical dressings, hospital clinic.....	2,114
Prescriptions filled.....	5,630
Laboratory examinations made.....	662
Major operations performed.....	13
Minor operations performed.....	395
Prostitutes examined.....	109
Chauffeurs examined.....	14
Constabulary recruits examined.....	7
Americans treated in hospital.....	86
Filipinos treated in hospital.....	590
Japanese treated in hospital.....	31
Europeans treated in hospital.....	23
Chinese treated in hospital.....	9
Male patients treated in hospital.....	562
Female patients treated in hospital.....	177
Deaths in hospital.....	43
Vaccinations in Benguet Province.....	1,104

TABLE OF DEATHS.

Nationality.	Adult or child.	Sex.	Causes of death.	Date.
1914.				
Igorot	Adult	Male	Pneumonia, lobar	Jan. 9
Filipino	do	do	Simple meningitis	Jan. 13
Igorot	do	do	Pneumonia, lobar	Jan. 21
Do	do	do	do	Jan. 22
Filipino	do	do	do	Jan. 31
Igorot	do	do	Landslide; crushed leg	Feb. 16
Do	do	do	Pneumonia, lobar	Feb. 22
Do	Child	do	Congenital debility	Feb. 28
Do	Adult	do	Cause unknown	Mar. 10
Do	do	do	Pneumonia, lobar	Do.
Do	do	do	Fracture of skull	Mar. 16
Do	do	do	Lacerated wound leg (dynamite); tetanus	Mar. 21
Filipino	do	Female	Burn; trunk and extremities	Mar. 24
Do	do	do	Pneumonia, lobar	May 2
Igorot	do	Male	Acute bacillary dysentery	May 14
Do	do	do	do	May 16
Filipino	do	Female	Puerperal septicæmia; acute nephritis of pregnancy.	May 20
Igorot	do	Male	Fracture femur, compound; fracture radius and ulna.	May 21
Filipino	do	do	Fracture of skull, compound	May 30
Igorot	do	do	Dysentery, bacillary, acute	June 2
Do	do	Female	Typhoid fever; cholecystitis, acute	June 3
Do	do	Male	Dysentery, bacillary, acute	June 5
American	do	do	Traumatism by fall; perforation of intestines; peritonitis, acute.	June 7
Igorot	do	do	Pneumonia, lobar.	June 8
Do	do	do	do	June 20
Filipino	do	Female	Bronchopneumonia.	July 4
Igorot	Child	Male	Mitral insufficiency; epistaxis	July 5
Do	Adult	do	Mitral and aortic insufficiency; Bright's disease.	July 23
Filipino	do	Female	Puerperal albuminuria and convulsions	Do.
Igorot	do	Male	Malaria, æstivo-autumnal	July 24
Do	do	do	Pneumonia, lobar.	July 30
Filipino	do	Female	Puerperal albuminuria and convulsions.	Aug. 5
Do	Child	do	Malaria, æstivo-autumnal; pemphigus	Aug. 19
Do	Adult	Male	Pneumonia, lobar.	Aug. 25
Igorot	do	do	Disseminated tuberculosis	Do.
Do	do	do	Traumatism by dynamite blast.	Aug. 26
Japanese	do	do	Bacillary dysentery, acute	Sept. 13
Filipino	do	Female	Bright's disease	Sept. 21
Japanese	do	Male	Typhoid fever	Oct. 25
Igorot	do	do	Cause undetermined	Nov. 25
Filipino	Child	do	Congenital debility	Dec. 7
Do	Adult	Female	Puerperal septicæmia	Dec. 9
Igorot	do	Male	Pneumonia, lobar; myocarditis, acute	Dec. 13

Baguio Hospital Division—Continued.

REPORT OF TUBERCULOSIS CASES.

[Classification used is that recommended by the National Association for the Study and Prevention of Tuberculosis.]

Case No.	Race.	Sex.	Age.	Condition on admission.	Stage.	Lung involvement.	Gain in weight.	Complications.	Days treated.	Condition on discharge.
			Yrs.				Kilos.			
1100	European	Male	24	Moderately advanced	II	Right upper lobe	7.5	Hemoptysis	305	Improved.
1554	American	do	42	do	II	Left lower lobe	(a)	Haemorrhages	120	Do.
1669	Filipino	Female	23	Incipient	I	Right apex	(b)	do	130	Do.
1734	do	Male	23	do	I	Left apex	2.7	do	30	Do.
1773	do	do	22	Moderately advanced	II	Right upper lobe	7	Haemorrhage	210	Apparently cured
1837	do	do	23	Far advanced	III	Both upper lobes	2.7	Gonorrhoea	60	Improved.
1856	do	do	25	do	III	Right lung entire	(a)	Haemorrhages	70	Do.
1903	do	do	22	do	III	Left lung entire	3	do	50	Do.
2004	American	Female	39	do	III	Right lung, left upper lobe	(a)	Haemorrhage	175	Do.
2101	Filipino	Female	24	Incipient	I	Right apex	3	do	172	Disease arrested.
2199	Igorote.	Male	29	do	I	do	4.4	do	68	Do.

* Not weighed.

^b No gain.

Patients treated during the calendar year, 19 (Americans, 3; Europeans, 2; Filipinos, 14).
 Patients remaining in hospital December 31, 1914, 8 (Americans, 1; Europeans, 1; Filipinos, 6).
 Cases to be reported, 11 (Americans, 2; Europeans, 1; Filipinos, 8).

BAYOMBONG HOSPITAL.
HOSPITAL CASES.

Diseases.	Remaining at last report.	Admitted.	Died.	Discharged.	Remaining.
1. Typhoid fever	1	3		4	
4. Malaria		5		5	
10. Influenza		2		2	
14. Dysentery		2		2	
27. Beriberi		2	1	1	
28. Tuberculosis of the lungs		6		5	1
34. Tuberculosis of other organs		1		1	
44. Cancer and other malignant tumors of the skin		2		1	1
47. Acute articular rheumatism		4		4	
48. Chronic rheumatism and gout		2		1	1
54. Anæmia, chlorosis	1	10		10	1
61. Simple meningitis		1		1	
68. Other forms of mental alienation		1		1	
71. Convulsion of infants		1		1	
76. Diseases of the ears		1		1	
78. Acute endocarditis		1		1	
86. Diseases of the nasal fossæ		1		1	
89. Acute bronchitis		1		1	
99. Diseases of the mouth and annexa		1		1	
103. Other diseases of the stomach (cancer excepted)	1	5		6	
104. Diarrhoea and enteritis (under 2 years)		2		2	
107. Intestinal parasites		2		1	1
119. Acute nephritis		3		3	
122. Other diseases of the kidneys and annexa		2	1	1	
132. Salpingitis and other diseases of the female genital organs		3		3	
134. Accidents of pregnancy		2		2	
144. Acute abscess		2		2	
145. Other diseases of the skin and annexa		4		3	1
171. Traumatism by cutting or piercing instruments		3		3	
172. Traumatism by fall	1	2		3	
175. Traumatism by other crushing (vehicles, railroads, landslides, etc.)		1		1	
176. Injuries by animals	1	1		2	
186. Other external violence		1		1	
Total	5	80	2	77	6

Patients treated in the out-patient clinic at the Bayombong Hospital, 2,131.

CHINESE HOSPITAL SICK REPORT.

[Dr. Tee Han Kee, physician in charge.]

Status.	Male.	Female.	Total.
In hospital at last report	18		18
Received	324		324
Discharged	236		236
Transferred			
Deaths	87		87
Remaining in hospital	19		19

CULION LEPER COLONY DIVISION.

Status.	Americans.		Europeans.		Filipinos.		Chinese.		Others.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
Remaining at the beginning of year	1		2		2,068	1,207	2		13	5	3,293
Admitted					614	244	1				859
Readmitted					19	9					28
Born					32	19					51
Died					334	176	1		2		513
Discharged					18	8					26
Transferred											
Escaped					78	17					95
Remaining at end of year	1		2		2,303	1,278	2		11	5	3,602

Culion Leper Colony Division—Continued.

MOVEMENT OF POPULATION, BY MONTHS.

Month.	Admissions.	Readmissions.	Births.	Escapes.	Deaths.	Discharges.	Marriages.
January	72	1	4		74	1	6
February	1		1		59		4
March	146	1		21	38		
April	201	3	3	32	35	23	3
May		5	3	9	26		16
June	68	4	6	13	36		4
July			6	3	48		3
August	108	9	5		50		1
September	32	1	6	4	48		2
October			6		43		1
November			6	8	22	2	4
December	231	4	5	5	34		
Total	859	28	51	95	513	26	44

POPULATION, BY NATIONALITY.

Nationality.	Male.	Female.	Total.
Americans	1		1
Europeans	2		2
Chinese	2		2
Chamorros	11	5	16
Filipinos	2,303	1,278	3,581
Total	2,319	1,283	3,602

POPULATION, BY CIVIL CONDITION.

Civil condition.	Male.	Female.	Total.
Single	733	275	1,008
Married	1,040	623	1,663
Widowed	108	147	255
Children	438	238	676
Total	2,319	1,283	3,602

BIRTHS.

Total births from Jan. 1, 1914, to Dec. 31, 1914	51
Legitimate	24
Illegitimate	27
Conceived at the colony	45
Deaths among these births	12

MARRIAGES, BY AGES AND CIVIL CONDITION.

Age.	Males.		Females.									
	Single.	Widowed.	To 20 years.		To 25 years.		To 30 years.		To 40 years.		Over 40 years.	
			Single.	Widowed.	Single.	Widowed.	Single.	Widowed.	Single.	Widowed.	Single.	Widowed.
From 15 years to 20 years	12		9		2	1						
From 21 years to 25 years	17	1	8	2	4		1	2			1	
From 26 years to 30 years	6		3				2	1				
From 31 years to 40 years	4	2	2		1				1			2
From 41 years to 50 years												
Over 50 years	1	1								2		
Total	40	4	22	2	7	1	3	3	1	2	1	2

In these 44 marriages the contracting parties were all Filipinos; there were no divorced persons married; no known relationship or affinity.

Culion Leper Colony Division—Continued.

CONTAGIOUS DISEASES.

No contagious diseases occurred during the time covering this report.

TABLE OF DEATHS.

1. Typhoid fever	1	79. Carditis—Continued.	
4. Malaria	4	Cardiac asthma	1
Pernicious	4	Cardiac lesion	1
Chronic	1	Endocarditis	4
Malaria and senile debility	1	Rheumatic	3
Malaria and leprous cachexia	1	Fatty degeneration of heart	1
Malaria fever	2	Myocarditis sclerotic	1
Malaria cachexia	9	Mitral insufficiency	1
	22		19
14. Dysentery	5	80. Angina pectoris	1
Bacillary	1	87. Oedema of larynx, acute	1
Chronic	2		
	8	90. Bronchitis	3
17. Leprous cachexia	139	Chronic	5
Leprous cachexia and septicaemia	1	Bronchitis and leprous cachexia	11
Leprous cachexia and pernicious anaemia	1	Bronchitis and senile debility	2
Leprous cachexia and senile debility	2	Bronchitis and pulmonary congestion	1
Leprous senile degeneration	6	Bronchitis and cerebral apoplexy	1
Leprous fever	4		23
Terminal cachexia	2		
	156	91. Broncho-pneumonia :	
20. Purulent infection	4	Leprous	5
Septicaemia	2	Acute	1
Septicaemia and leprous cachexia	2	Lobular pneumonia and chronic nephritis	1
	8		7
24. Tetanus	1	92. Pneumonia and leprous cachexia	1
27. Beriberi	4	Pneumonia, leprous	1
28. Tuberculosis	1		2
Pulmonary	67	93. Pleurisy, acute	1
Pulmonary and haemorrhage	1	94. Pulmonary congestion	3
Pulmonary and leprous enteritis	1	98. Hemoptysis	1
Tuberculous cachexia	2	102. Gastric ulcer	1
Tuberculous and leprous cachexia	3		
	76	104. Enteritis	1
31. Tuberculosis, abdominal	1	Gastroenteritis	1
32. Pott's disease	1		2
35. Tuberculosis, general	1	105. Enteritis	12
47. Rheumatic fever	1	Chronic	23
Rheumatic endocarditis	2	Acute	1
	3	Leprous	1
48. Rheumatism, chronic	1	Enteritis and leprous cachexia	26
54. Anaemia	1	Enteritis, leprous, and tuberculosis	1
61. Meningitis :		Enteritis, leprous, and senile debility	1
Acute	1	Dysentery	6
Cerebrospinal, leprous	1	Gastroenteritis	1
	2	Acute	1
64. Cerebral apoplexy	2	Chronic	2
Cerebral haemorrhage	1	Leprous	1
	3	Gastroenteritis, leprous, acute	1
66. Paralysis, postpuerperal	1	Intestinal catarrh	5
68. Dementia	1		82
71. Infantile eclampsia	6	108. Appendicitis	2
74. Encephalitis, acute leprous	1	109. Intestinal obstruction	1
78. Endocarditis	8	113. Fatty degeneration of liver	2
79. Carditis :		115. Hepatic congestion	1
Acute	1	117. Peritonitis :	
Leprous	1	Acute	1
Cardiac arrhythmia	1	Chronic	1
Cardiac arrhythmia, leprous	4	119. Nephritis, acute	2
			1
		120. Nephritis	4
		Chronic	5
		Leprous	1
		Interstitial	1
		Chronic	1

Culion Leper Colony Division—Continued.

TABLE OF DEATHS—Continued.

120. Uremia	5	Gangrene of feet and hands and lep- rous cachexia	2
	17		17
135. Postpartum haemorrhage	1	147. Rheumatism chronic	1
136. Difficult labor	1	151. Congenital debility	5
137. Puerperal septicaemia	1		
142. Gangrene	6	154. Senile debility	7
Gangrene and leprous cachexia.....	3	Degeneration, senile leprous.....	1
Gangrene of sacral region.....	1	Terminal cachexia	1
Gangrene of feet.....	1		9
Gangrene of feet and leprous ente- ritis	1	164. Fish poisoning	1
Gangrene of feet and senile debility	1	167. Burns and septicaemia.....	1
Gangrene of feet and septicaemia	1	189. Cardiac failure	3
Gangrene of feet and leprous cache- xia	1	Total	513

PRISON SANITATION DIVISION.

REPORT OF SICK.

Diseases.	Remaining at last report.	Admitted.	Died.	Transferred.	Discharged.	Remaining.
1. Typhoid fever		1			1	
4. Malaria		63			61	2
9. Diphtheria and croup		2			2	
12. Asiatic cholera		63	3	19	41	
Bacilli carriers		196		1	179	16
14. Dysentery	5	514	2	1	500	16
17. Leprosy		4		4		
19. Other epidemic diseases		266		7	250	9
20. Purulent infection and septicaemia		27	2		25	
27. Beriberi		5			2	3
28. Tuberculosis of the lungs	123	156	55	63	74	87
30. Tuberculous meningitis		1	1			
31. Abdominal tuberculosis	1	5	2		4	
32. Pott's disease		1	1			
34. Tuberculosis of other organs	2	27	1		23	5
35. Disseminated tuberculosis		1	1			
37b. Syphilis, secondary	1	47			46	2
37c. Syphilis, tertiary		3			1	2
38a. Soft chancre		2			1	1
38b. Gonococcus infection	9	130			126	13
44. Cancer and other malignant tumors of the skin		2			2	
45. Cancer and other malignant tumors of other organs or of organs not specified		2			2	
46. Other tumors (tumors of the female genital organs excepted)		8			7	1
47. Acute articular rheumatism		7			7	
48. Chronic rheumatism and gout	4	5			9	
53. Leuchaemia		1			1	
56. Alcoholism (acute or chronic)	1	5			6	
59. Other chronic poisonings	11	654			653	12
61. Simple meningitis		2	2			
62. Locomotor ataxia		2			1	1
63. Other diseases of the spinal cord		1			1	
66. Paralysis without specified cause		5		1	3	1
68. Other forms of mental alienation	1	14		11	3	1
69. Epilepsy		5		1	3	1
73a. Hysteria	1				1	
73b. Neuralgia and neuritis		2			2	
75b. Trachoma		2			1	1
75c. Other diseases of the eyes and their annexa	2	62			55	9
76. Diseases of the ears		4			4	
77. Pericarditis		2	1		1	
79. Organic diseases of the heart	1	5	3		3	
81. Diseases of the arteries, atheroma, aneurysms, etc	1	3			3	1
83. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	3	44			45	2
84. Diseases of the lymphatic system (lymphang- itis, etc.)		3			3	
86. Diseases of the nasal fossae		5			5	

Prison Sanitation Division—Continued.

REPORT OF SICK—Continued.

Diseases.	Remaining at last report.	Admitted.	Died.	Transferred.	Discharged.	Remaining.
88. Diseases of the thyroid body	1	1			1	1
90. Chronic bronchitis		2			2	
91. Broncho-pneumonia	1	5	1		5	
92. Pneumonia	1	17	8		10	
93. Pleurisy	2	14			14	2
94. Pulmonary congestion, pulmonary apoplexy		3	1		2	
95. Gangrene of the lungs		3	3			
96. Asthma	6	35			28	13
98. Other diseases of the respiratory system (tuberculosis excepted)		2	1		1	
99a. Diseases of the teeth and gums		6			5	1
100. Diseases of the pharynx	3	7			10	
102. Ulcer of the stomach	1				2	
104. Diarrhoea and enteritis (under 2 years)		2			4	
105. Diarrhoea and enteritis (2 years and over)		5	1			
106. Ankylostomiasis	11	1,892			1,876	27
107. Intestinal parasites	16	2,486			2,468	34
108. Appendicitis and typhlitis		1			1	
109. Hernia, intestinal obstruction	5	53			47	11
110a. Diseases of the anus and faecal fistulas	1	21			21	1
110b. Other diseases of the intestines	2	20	1		21	
115. Other diseases of the liver		3			3	
116. Diseases of the spleen		1			1	
117. Simple peritonitis (nonpuerperal)		1			1	
119. Acute nephritis		3	1		2	
120. Bright's disease		5	3		2	
122. Other diseases of the kidneys and annexa		2	2			
123. Calculi of the urinary passages		1			1	
124. Diseases of the bladder		1			1	
125. Diseases of the urethra, urinary abscess, etc.		2			2	
127. Nonvenereal diseases of the male genital organs	3	59			57	5
128. Uterine haemorrhage (nonpuerperal)		1			1	
130b. Other diseases of the uterus	1	7			8	
131. Cysts and other tumors of the ovary		2			2	
132. Salpingitis and other diseases of the female genital organs		1			1	
134b. Accidents of pregnancy		1			1	
136. Other accidents of labor		2			2	
141. Puerperal diseases of breast		4			4	
143. Furuncle		4			4	
144. Acute abscess	3	20			22	1
145a. Trichophytosis (tinea and peladas)	5	38			35	8
145b. Scabies	2	23			25	
145c. Other diseases of the skin and annexa		15			14	1
146. Diseases of the bones (tuberculosis excepted)		4	1		8	
147. Diseases of the joints (tuberculosis and rheumatism excepted)		6			6	
148. Amputations		1			1	
149. Other diseases of the organs of locomotion		6			6	
150. Congenital malformations (stillbirths not included)		14			12	2
167. Burns (conflagration excepted)		2			2	
171. Traumatism by cutting or piercing instruments		19			19	
174. Traumatism by machines		3			3	
184. Homicide by other means		1	1			
185a. Dislocations		3			3	
185b. Sprains		4			4	
185c. Fractures (cause not specified)	1	13			14	
186. Other external violence		9			9	
189. Cause of death not specified or ill-defined	10	293	1	4	259	89
Total	241	7,508	99	112	7,206	332

Prison Sanitation Division—Continued.

BILIBID PRISON LABORATORY EXAMINATIONS.

SPECIMENS.

Blood	6,337
Faeces	17,108
Sputum	3,856
Miscellaneous	2,357

MISCELLANEOUS.

Patients attended in the dressing rooms.....	13,042
Prescriptions filled	7,999
Vaccinations performed	10,674
Autopsies held	100

BILIBID PRISON REPORT OF DEATHS.

Diseases.	Presidio.				Carcel.				Total.	Civil condition.			
	Fili- pinos.		Chi- nese.		Fili- pinos.		Chi- nese.			Married.	Single.	Widowed.	Unknown.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.					
12. Asiatic cholera	2				1				3	3			
14. Dysentery	2								2	1		1	
20. Purulent infection and septicaemia	1				1				2		2		
28. Tuberculosis of the lungs	46				9		1		56	38	10	7	1
30. Tuberculous meningitis	1				1				1	1			
31. Abdominal tuberculosis	1								1	1			
32. Pott's disease	1								1		1		
34. Tuberculosis of other organs	1								1			1	
35. Disseminated tuberculosis	1								1	1			
61. Simple meningitis	1				1				2	1	1		
74. Other diseases of the nervous system	1				1				1	1			
78. Acute endocarditis	1				1				1	1			
79. Organic diseases of the heart	2				1				3	1	2		
85. Haemorrhage; other diseases of the circulatory system							1		1		1		
89. Acute bronchitis	1								1			1	
91. Broncho-pneumonia	1								1	1			
92. Pneumonia	7				2				9	7		2	
95. Gangrene of the lungs	2								2	1		1	
98. Other diseases of the respiratory system (tuberculosis excepted)	1								1			1	
105. Diarrhoea and enteritis (2 years and over)							1		1	1			
109. Hernia, intestinal obstruction	1								1	1			
119. Acute nephritis	1								1		1		
120. Bright's disease	2				1				3	3			
122. Other diseases of the kidneys and annexa	1				1				2		1	1	
146. Diseases of the bones (tuberculosis ex- cepted)	1								1		1		
186. Other external violence	2				9				11	7	4		
189. Cause of death not specified or ill-de- fined	1								1			1	
Total	81				27		3		111	70	24	16	1

Died in Bilibid Hospital	99
Legally executed	11
Died in San Lazaro Hospital	1

Total 111

Prison Sanitation Division—Continued.

REPORT OF SICK AND INJURED PRISONERS AT STOCKADE HOSPITAL,
CORREGIDOR.

Diseases.	Remaining at last report.	Admitted.	Died.	Transferred.	Discharged.	Remaining.
4. Malaria	1	29	1	1	28	
10. Influenza		1			1	
14. Dysentery	2	49	1	1	48	1
19. Other epidemic diseases		21		7	13	1
20. Purulent infection and septicaemia		49	2		41	6
28. Tuberculosis of the lungs		18	1	15	1	1
29. Acute military tuberculosis		1		1		
31. Abdominal tuberculosis	1			1		
32. Pott's disease		1		1		
34. Tuberculosis of other organs		3		1		1
38b. Gonococcus infection	3	18		2	17	2
46. Other tumors (tumors of the female genital organs excepted)		2		1	1	
47. Acute articular rheumatism		17			17	
53. Leuchaemia		1		1		
66. Paralysis without specified cause		1			1	
68. Other forms of mental alienation		1				
75c. Other diseases of the eyes and their annexa	8	274		2	278	2
76. Diseases of the ears		7			6	1
79. Organic diseases of the heart		1	1			
83. Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.)		14		3	11	
84. Diseases of the lymphatic system (lymphangitis, etc.)	1	16			17	
88. Diseases of the thyroid body		1			1	
89. Acute bronchitis	2	42			43	1
90. Chronic bronchitis		31		1	29	1
91. Broncho-pneumonia		3	1		2	
92. Pneumonia	5	19	8		13	3
93. Pleurisy		6		1	3	2
96. Asthma		5		2	3	
98. Other diseases of the respiratory system (tuberculosis excepted)		4			4	
99. Diseases of the mouth and annexa	1	30			29	2
100. Diseases of the pharynx		9			9	
103. Other diseases of the stomach (cancer excepted)		23			23	
105. Diarrhoea and enteritis (2 years and over)		33			33	
106. Ankylostomiasis		97			92	5
107. Intestinal parasitæ		31			31	
110. Other diseases of the intestines	2	111		2	111	
120. Bright's disease		1	1			
122. Other diseases of the kidneys and annexa		1			1	
123. Calculi of the urinary passages		1			1	
124. Diseases of the bladder		7			7	
125. Diseases of the urethra, urinary abscess, etc.		2			2	
127. Nonvenereal diseases of the male genital organs		10			9	1
142. Gangrene		1	1			
143. Furuncle	1	84			85	
144. Acute abscess	3	133	1	1	132	2
145. Other diseases of the skin and annexa	1	37			38	
146. Diseases of the bones (tuberculosis excepted)		3		1	2	
147. Diseases of the joints (tuberculosis and rheumatism excepted)		2			2	
149. Other diseases of the organs of locomotion		15			15	
167. Burns (conflagration excepted)		7			7	
171. Traumatism by cutting or piercing instruments		44			44	
172. Traumatism by fall	1	2			3	
175. Traumatism by other crushing (vehicles, railways, landslides, etc.)	1	4	1	1	3	
179. Effects of heat		7			7	
185. Fractures (cause not specified)		10	1	1	7	1
186. Other external violence	2	107			106	3
189. Cause of death not specified or ill-defined	2	70		2	70	
Total	37	1,517	20	50	1,448	36

Prison Sanitation Division—Continued.

IWAHIG PENAL COLONY REPORT OF SICK.

Diseases.	Remaining at last report.	Admitted.	Died.	Discharged.	Remaining.
4. Malaria.....	4	1,133	5	1,092	40
14. Dysentery.....		3		3	
17. Leprosy.....		1		1	
20. Purulent infection and septicaemia.....	1	100		96	5
28. Tuberculosis of the lungs.....	14	201	20	174	21
31. Abdominal tuberculosis.....		2	2		
34. Tuberculosis of other organs.....		1			1
38a. Soft chancre.....		1			1
38b. Gonococcus infection.....		2		2	
47. Acute articular rheumatism.....	3	11		13	1
48. Chronic rheumatism and gout.....		2		2	
64. Cerebral haemorrhage, apoplexy.....		1	1		
66. Paralysis without specified cause.....		1			1
73b. Neuralgia and neuritis.....		1		1	
75b. Trachoma.....		2		2	
75c. Other diseases of the eyes and their annexa.....		4		4	
76. Diseases of the ears.....		1		1	
84. Diseases of the lymphatic system (lymphangitis, etc.).....		1		1	
85. Haemorrhage; other diseases of the circulatory system.....		2		2	
90. Chronic bronchitis.....		8		8	
92. Pneumonia.....		1		1	
94. Pulmonary congestion, pulmonary apoplexy.....		1		1	
98. Other diseases of the respiratory system (tuberculosis excepted).....		32		32	
99. Diseases of the mouth and annexa.....		3		3	
103. Other diseases of the stomach (cancer excepted).....		11		11	
105. Diarrhoea and enteritis (2 years and over).....		21		21	
106. Ankylostomiasis.....		12		12	
107. Intestinal parasites.....		7		7	
110a. Diseases of the anus and faecal fistulas.....	1	2		3	
110b. Other diseases of the intestines.....		7		7	
113. Cirrhosis of the liver.....		1	1		
115. Other diseases of the liver.....		1	1		
118. Other diseases of the digestive system (cancer and tuberculosis excepted).....	1			1	
119. Acute nephritis.....	1			1	
120. Bright's disease.....		2		1	1
127. Nonvenereal diseases of the male genital organs.....		1		1	
143. Furuncle.....		7		7	
144. Acute abscess.....		28		25	3
145b. Scabies.....		2		2	
145c. Other diseases of the skin and annexa.....	1	25		25	1
148. Amputations.....		1		1	
149. Other diseases of the organs of locomotion.....		6		6	
165a. Venomous bites and stings.....		5		5	
167. Burns (conflagrations excepted).....		2		2	
170. Traumatism by firearms.....		2	1	1	
171. Traumatism by cutting or piercing instruments.....		45		44	1
185c. Fractures (cause not specified).....	2	1		3	
185. Other external violence.....		57		57	
187. Ill-defined organic diseases.....	2	66		67	1
Total.....	30	1,827	31	1,749	77

IWAHIG PENAL COLONY LABORATORY EXAMINATIONS.

SPECIMENS.

Blood.....	1,221
Faeces.....	194
Urine.....	38
Sputum.....	59

MISCELLANEOUS.

Major operations.....	8
Minor operations.....	122
Dressings, including suturing.....	6,446
Anaesthetics:	
General.....	3
Local.....	24

SANITARY ENGINEERING DIVISION.

STATISTICAL INFORMATION BY DISTRICTS, MANILA ONLY, FISCAL YEAR
ENDED DECEMBER 31, 1914.

	Health districts.					
	No. 1.	Nos. 2 and 3.	No. 4.	No. 5.	No. 6.	Total.
Orders pending Dec. 31, 1913	66	214	96	141	5	522
Orders issued:						
Minor orders	40	177	7	17	10	251
Sewer orders	41	187	32	4	2	266
Vacating orders	51	175	39	207	4	476
Total	132	539	78	228	16	998
Grand total	198	753	174	369	21	1,515
Orders completed:						
Minor orders	41	160	7	11	5	224
Sewer orders	44	158	56	7	2	267
Vacating orders	45	154	29	141	2	371
Total	130	472	92	159	9	862
Orders canceled:						
Minor orders	3	18		60		81
Sewer orders	8	25	10	1		44
Vacating orders	9	34	1	10		54
Total	20	77	11	71		179
Orders pending Dec. 31, 1914:						
Minor orders	9	67	9	45	6	136
Sewer orders	34	110	45	5	3	197
Vacating orders	5	27	17	89	3	141
Total	48	204	71	139	12	474

STATISTICAL INFORMATION BY QUARTERS, MANILA ONLY, FISCAL YEAR
ENDED DECEMBER 31, 1914.

	Quarter.				
	First.	Second.	Third.	Fourth.	Total.
Orders pending Dec. 31, 1913					522
Orders issued:					
Minor orders	96	48	87	20	251
Sewer orders	59	116	59	32	266
Vacating orders	58	190	148	80	476
Total	213	354	294	132	998
Grand total					1,515
Orders completed:					
Minor orders	96	18	54	56	224
Sewer orders	56	70	78	63	267
Vacating orders	91	7	48	225	371
Total	243	95	180	344	862
Orders canceled:					
Minor orders	64	4	8	5	81
Sewer orders	17	9	12	6	44
Vacating orders	38	1	7	8	54
Total	119	14	27	19	179
Orders pending Dec. 31, 1914:					
Minor orders					136
Sewer orders					197
Vacating orders					141
Total					474

Sanitary Engineering Division—Continued.

STATISTICAL INFORMATION BY DISTRICTS, MANILA ONLY, FISCAL YEAR
ENDED DECEMBER 31, 1914.

	Health districts.					
	Intra- muros.	Meisic.	Sampa- loc.	Tondo.	Paco.	Total.
Strong-material plans approved for new build- ings, including additions and alterations.....	55	167	68	64	28	382
Strong-material plans canceled.....	1	1	2			4
Permits for minor building construction:						
Approved.....	92	205	95	37	32	461
Disapproved.....	22	68	20	23	4	137
Grand total.....	170	441	185	124	64	984
New buildings completed.....	83	138	69	58	43	391
Light and mixed material structures:						
Permits approved.....	3	4	108	386	125	626
Permits disapproved.....			30	63	26	119
Total.....	3	4	138	449	151	745
Total number of building projects passed upon.....	256	583	392	631	258	2,120

STATISTICAL INFORMATION BY QUARTERS, MANILA ONLY, FISCAL YEAR
ENDED DECEMBER 31, 1914.

	Quarter.				Total.
	First.	Second.	Third.	Fourth.	
Strong-material plans approved for new buildings includ- ing additions and alterations.....	111	101	88	82	382
Strong-material plans canceled.....				4	4
Permits for minor building construction:					
Approved.....	135	137	122	67	461
Disapproved.....	43	17	42	35	137
Grand total.....	289	255	252	188	984
New buildings completed.....	77	50	79	185	391
Light and mixed material structures:					
Permits approved.....	173	188	113	152	626
Permits disapproved.....	29	26	12	52	119
Total.....	202	214	125	204	745
Total number of building projects passed upon.....	568	519	456	577	2,120

STATISTICAL INFORMATION BY DISTRICTS AND QUARTERS, MANILA ONLY,
FISCAL YEAR ENDED DECEMBER 31, 1914.

	Health districts.					
	Intra- muros.	Meisic.	Sampa- loc.	Tondo.	Paco.	Total.
Prosecutions:						
Convictions.....	10	17	4	21	1	53
Dismissals.....	1	12	11	8		*32
Amount of fines.....	P365.00	P420.00	P206.20	16.20	P20.00	P1,127.40

* Arrangement made to comply with the orders.

	Quarter.				
	First.	Second.	Third.	Fourth.	Total.
Prosecutions:					
Convictions.....	12	9	6	26	53
Dismissals.....	15	9	7	1	*32
Amount of fines.....	P121.20	P475.20	P241.00	P290.00	P1,127.40

* Arrangement made to comply with the orders.

Sanitary Engineering Division—Continued.

STATISTICAL INFORMATION BY DISTRICTS AND QUARTERS, MANILA ONLY,
FISCAL YEAR ENDED DECEMBER 31, 1914.

	Health districts.					
	Intra-muros.	Mel-sic.	Sampa-loc.	Tondo.	Paco.	Total.
Plumbing permits issued	213	592	192	134	80	1,211
Plumbing projects completed	186	575	161	133	81	1,136
Premises connected to the sanitary sewer to Jan. 1, 1914	1,029	1,439	559	156	220	3,403
Premises connected Jan. 1 to Dec. 31, 1914	82	311	83	66	30	572
Total, Dec. 31, 1914	1,111	1,750	642	222	250	3,975

	Quarter.				
	First.	Second.	Third.	Fourth.	Total.
Plumbing permits issued	331	326	284	270	1,211
Plumbing projects completed	301	287	266	282	1,136
Premises connected to the sanitary sewer to Jan. 1, 1914					3,403
Premises connected Jan. 1 to Dec. 31, 1914	148	146	148	130	572
Total, Dec. 31, 1914					3,975

SAN LAZARO HOSPITALS DIVISION.

Patients in hospital January 1, 1914	414
Patients admitted during the year	2,828
Patients discharged during the year	1,812
Patients transferred during the year	889
Patients escaped during the year	78
Patients died during the year	395
Patients remaining in hospital December 31, 1914	573

Average number of patients subsisted per day during 1914.

January	416	July	497
February	403	August	552
March	449	September	603
April	480	October	480
May	491	November	511
June	554	December	566

Average daily cost of subsistence for 1914.

January	₱0.297	July	₱0.277
February	.338	August	.294
March	.297	September	.294
April	.287	October	.369
May	.264	November	.359
June	.287	December	.356

General average for year, ₱0.3099.

INSANE DEPARTMENT.

Status.	Americans.		Europeans.		Filipinos.		Chinese.		Others.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
In hospital Jan. 1, 1914	4	—	3	—	215	52	3	—	2	—	280
Admitted	41	—	5	1	83	31	10	—	1	3	175
Discharged	30	—	6	—	36	23	4	—	—	2	101
Transferred	2	—	—	—	7	3	—	—	—	—	12
Escaped	—	—	—	—	3	—	—	—	—	—	3
Died	4	—	—	—	24	11	2	—	1	—	42
Remaining	9	—	2	1	228	46	7	—	2	1	296

San Lazaro Hospitals Division—Continued.

LEPER DEPARTMENT.

Status.	Americans.		Europeans.		Filipinos.		Chinese.		Others.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
In hospital Jan. 1, 1914.....			1		54	21					76
Admitted.....	1				279	110	11			1	402
Discharged.....					21	15	10			1	47
Transferred.....					111	32					143
Escaped.....					58	9					67
Died.....			1		13	2					16
Remaining.....	1				130	73	1				205

VARIOLOID DEPARTMENT.

In hospital at last report.....											
Admitted.....			1		21	5	1				28
Discharged.....					13	5					18
Transferred.....					6						6
Died.....											
Remaining.....			1		2		1				4

VARICELLA DEPARTMENT.

In hospital at last report.....					3						3
Admitted.....	5	4	1		132	95	1		1	2	241
Discharged.....	5	4	1		135	94	1		1	2	243
Transferred.....						1					1
Died.....											
Remaining.....											

DIPHThERIA DEPARTMENT.

In hospital at last report.....											
Admitted.....	11	3			56	30					100
Discharged.....	8	1			24	17					50
Discharged, not diphtheria.....	2	2			1						5
Transferred.....						1					1
Died.....					15	7					22
Remaining.....	1				16	5					22

NOTE.—Eleven of the 50 cases discharged were carriers. Eight of the 22 deaths and 1 transferred were not diphtheria.

BUBONIC PLAGUE DEPARTMENT.

In hospital at last report.....											
Admitted.....					20	4	18		4		46
Discharged.....					3	1	9				13
Discharged, not plague.....					9	1	5		2		17
Transferred.....					2		1		1		4
Escaped.....					1						1
Died.....					5	2	3		1		11
Remaining.....											

Includes suspects and contacts.

TUBERCULOSIS DEPARTMENT.

In hospital Jan. 1, 1914.....					28	12			1		41
Admitted.....	5		1		355	129			4		494
Discharged.....	1				182	77			3		263
Transferred.....	2				88	12					102
Died.....	1				92	42			2		137
Remaining.....	1		1		21	10					33

[illegible]

TETANUS DEPARTMENT.

In hospital at last report				1					1
Admitted	1			23	9				32
Discharged	1			10	3				14
Discharged, not tetanus				1					1
Transferred				1					1
Died				11	6				17
Remaining				1					1

CHOLERA DEPARTMENT.

In hospital at last report.....									1	1
Admitted.....	25	2	3	1	622	398	28	1	28	1,109
Discharged.....	4		1	1	128	73			16	223
Discharged, not cholera.....	4	2			54	21			1	83
Discharged carriers.....	11		1		284	238	27	1	8	571
Transferred.....	1				28	2				31
Transferred suspect cholera.....	1				11					12
Transferred, not cholera.....					7	3				10
Transferred carriers.....	1				36	10				47
Died.....	2		1		65	48	1		4	121
Died, not cholera.....					4	1				5
Escaped.....					2					2
Remaining.....	1				3	2				6

In hospital at last report						10				10
Admitted						59				59
Discharged						66				66
Died						1				1
Transferred						2				2
Remaining					.					

San Lazaro Hospitals Division—Continued.

MISCELLANEOUS DEPARTMENT.

Status.	In hos- pital at last re- port.	Admit- ted.	Dis- charged.	Trans- ferred.	Died.	Remain- ing.
Observation	2	22	11	8	5	
Gonorrhoea		1		1		
Hydrophobia (suspected)		2	2			
Cancer		2			2	
Mumps	1	36	35	1	1	
Paralysis		2			1	1
Baby		24	14	3	4	3
Typhoid fever		1			1	
Dysentery		1			1	
Anthrax		1			1	
Uraemia		1			1	
Arthritis		1	1			
Dengue		1	1			
Tonsillitis		2	2			
Pertussis		6	3		3	
Glanders		1			1	
Erysipelas		1			1	
Marasmus		1	1			
Scarlatina, suspected		2				2
Concussion of brain		1		1		
Total	3	109	71	14	21	6

MORGUE REPORT.

	Bodies.		Bodies.
Remaining in morgue from last report		Received—Continued.	
Received:		Status lymphaticus	1
Bubonic plague	21	Drowning	2
Cholera	207	Paralysis	1
Probable cholera	25	Fractured skull	1
Diphtheria	18	Glanders	1
Leprosy	16	Other diseases	120
Typhoid fever	3		
Tetanus	16	Total	640
Pulmonary tuberculosis	181		
Pneumonia	10	Dropped:	
Cerebral hæmorrhage	2	Buried by city	401
Mania (chronic)	2	Buried by family	165
Mania (depressive insanity)	1	Turned over to family	32
Senile dementia	1	Turned over to Army Morgue	2
Cancrum oris	1	Cremated	37
Cancer	2	Remaining in morgue	3
Dysentery, acute	1		
Dysentery, bacillary	4	Total	640
Stillborn	3		

San Lazaro Hospitals Division—Continued.

MORGUE AND CREMATORY DEPARTMENTS.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Bubonic plague	3	4	2	4	3	1	1	2	1				21
Cholera	12	3	4				25	35	84	19	11	14	207
Probable cholera							5	20					25
Diphtheria	3	1	2	1	1	2	1	1	4	1			18
Leprosy	1	1	1	1		1	2	1	3	2		8	16
Typhoid fever	1				1	1							3
Tetanus	1	1	3	1	2	1	1		2	3	1		16
Pulmonary tuberculosis	13	15	13	17	16	10	16	19	24	11	12	15	181
Pneumonia	1						1	2	1	1	4		10
Cerebral hæmorrhage	1									1			2
Mania, chronic	2												2
Mania (depressive insanity)	1												1
Senile dementia	1												1
Cancrum oris			1										1
Cancer			1			1							2
Dysentery, acute					1								1
Dysentery, bacillary					2	1		1					4
Stillborn					1	1	1						3
Status lymphaticus							1						1
Drowning							1		1				2
Paralysis								1					1
Fractured skull								1					1
Glanders										1			1
Other diseases	2	6	11	7	6	7	8	14	21	16	14	8	120
Total	42	32	37	31	33	26	63	97	141	55	42	41	640

SOUTHERN ISLANDS HOSPITAL DIVISION.

HOSPITAL CASES.

Diseases.	Remaining at last report.	Admitted.	Died.	Transferred.	Discharged.	Escaped.	Remaining.
1. Typhoid fever		21	8		12		1
4. Malaria	4	89	5		77	4	7
4a. Malarial cachexia		5			5		
5. Smallpox	1	29			29		1
6. Measles		2			2		
8. Whooping cough		4	1		3		
14. Dysentery		15	1		11		3
17. Leprosy		5		2	3		
18. Erysipelas		2	1				1
19. Other epidemic diseases		25			24		1
20. Purulent infection and septichæmia		1			1		
24. Tetanus		2	2				
27. Beriberi	1	25	2		20	2	2
28. Tuberculosis of the lungs		11	1		10		
31. Abdominal tuberculosis	1	5	2		4		
33. White swellings		1			1		
34. Tuberculosis of other organs		4			3		1
35. Disseminated tuberculosis		1			1		
37. Syphilis		3			3		
37c. Syphilis, tertiary		6			6		
37e. Syphilis, period not stated		1			1		
38b. Gonococcus infection		6			6		
39. Cancer and other malignant tumors of the buccal cavity		1			1		
43. Cancer and other malignant tumors of the breast		1	1				
44. Cancer and other malignant tumors of the skin	1	1			2		
45. Cancer and other malignant tumors of other organs or of organs not specified		4			4		
46. Other tumors (tumors of the female genital organs excepted)	3	20	1		22		
47. Acute articular rheumatism		7			7		
48. Chronic rheumatism and gout		2			1		1
49. Scurvy		1			1		
50. Diabetes		1			1		
51. Exophthalmic goitre		2			2		
54. Anæmia, chlorosis		2			2		
56. Alcoholism (acute or chronic)		1			1		
63. Other diseases of the spinal cord		3			3		
66. Paralysis without specified cause		5			5		
68. Other forms of mental alienation		7			7		
69. Epilepsy		3			3		
71. Convulsions of infants		1			1		
74. Other diseases of the nervous system		5			5		
75c. Other diseases of the eyes and their annexa	1	71			68		4
76. Diseases of the ears		6	1		5		
79. Organic diseases of the heart	1	4	2		3		
83. Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.)		11			10		1
84. Diseases of the lymphatic system (lymphangitis, etc.)		5			5		
85. Hæmorrhage; other diseases of the circulatory system		5	2		3		
86. Diseases of the nasal fossæ		2			2		
88. Diseases of thyroid body		2			2		
89. Acute bronchitis		9			9		
90. Chronic bronchitis		1			1		
91. Bronchopneumonia		3			3		
92. Pneumonia		4			4		
94. Pulmonary congestion, pulmonary apoplexy		3	1		2		
96. Asthma	1	1			2		
98. Other diseases of the respiratory system (tuberculosis excepted)		3			3		
99b. Other diseases of the mouth and annexa		8	1		7		
100. Diseases of the pharynx	1	22			23		
102. Ulcer of the stomach		2			2		
103. Other diseases of the stomach (cancer excepted)		10			10		
104. Diarrhœa and enteritis (under 2 years)		5	4		1		
105. Diarrhœa and enteritis (2 years and over)		20	1		19		
105a. Optional title. Including: Due to alcoholism	1				1		
106. Ankylostomiasis	3	145	3		129	3	13
107. Intestinal parasites	5	561	16		528	2	20
108. Appendicitis and typhlitis		14			13		1
109. Hernia, intestinal obstruction		7			5		2
110b. Other diseases of the intestines		16	1		14		1
113. Cirrhosis of the liver		6	2		4		
114. Biliary calculi		1			1		

Southern Islands Hospital Division—Continued.

HOSPITAL CASES—Continued.

Diseases.	Remaining at last report.	Admitted.	Died.	Transferred.	Discharged.	Escaped.	Remaining.
115. Other diseases of the liver		4	1		3		
116. Diseases of the spleen		2			2		
117. Simple peritonitis (nonpuerperal)		3	2		1		
120. Bright's disease		11	3		7		1
121. Chyluria		1			1		
122. Other diseases of the kidneys and annexa		4	1		3		
123. Calculi of the urinary passages		3			2		1
124. Diseases of the bladder		4			4		
125. Diseases of the urethra, urinary abscess, etc		1			1		
126. Diseases of the prostate		3			3		
127. Nonvenereal diseases of the male genital organs	2	10			10		2
129. Uterine tumors (noncancerous)		8	2		6		
130b. Other diseases of the uterus	1	19			20		
131. Cysts and other tumors of the ovary		8			8		
132. Salpingitis and other diseases of the female genital organs		4			4		
133. Nonpuerperal diseases of the breast (cancer excepted)		5			5		
134a. Normal labor		13			12		1
134b. Accidents of pregnancy		4			4		
135. Puerperal hæmorrhage		1	1				
136. Other accidents of labor		3			3		
138. Puerperal albuminuria and convulsions		1			1		
142. Gangrene		1	1				
143. Furuncle	1	2			3		
144. Acute abscess	1	30	1		28		2
145c. Other diseases of the skin and annexa	3	32	2		31	1	1
146. Diseases of the bones (tuberculosis excepted)		7			7		
147. Diseases of the joints (tuberculosis and rheumatism excepted)		1			1		
149. Other diseases of the organs of locomotion		1			1		
150. Congenital malformations (stillbirths not included)	1	6	1		5		1
151. Congenital debility, icterus, and sclerema		9			3		1
151. (1) Premature birth (not stillborn)		7			7		
151. (2) Congenital debility		2	2				
153. Lack of care	1	8	4		4		1
154. Senility		1			1		
160. Suicide by cutting or piercing instruments		1			1		
167. Burns (conflagration excepted)		10	1		9		
168. Absorption of deleterious gases (conflagration excepted)		1			1		
170. Traumatism by firearms		3			3		
171. Traumatism by cutting or piercing instruments		9			9		
172. Traumatism by fall	1	6			7		
175. Traumatism by other crushing (vehicles, railways, landslides, etc.)		2			2		
176. Injuries by animals		3			3		
183. Homicide by cutting or piercing instruments	3	17	1		19		
184. Homicide by other means	1	2	2		1		
185c. Fractures (cause not specified)	3	16	1		17		1
186. Other external violence		30	1		29		
189a. Cause of death not specified or ill-defined	1	20			20	1	
189b. No disease, feigned disease		5			5		
Total	43	1,621	86	2	1,491	13	72

Patients treated in the outdoor department at the Southern Islands Hospital division, 4,037.

Southern Islands Hospital Division—Continued.

MISCELLANEOUS STATISTICS, SUMMARY, ETC.

Outdoor department.

Patients	3,817
Cases of disease	4,037
Classified diseases	135
Visits to outpatients	17,209
Surgical dressings	14,329
Major emergencies dressed	13
Minor emergencies dressed	61
Minor operations performed	235
Vaccinations	62
Physical examinations	19
Calls made by hospital medical staff	133
Prescriptions filled	7,016

Hospital cases.

Patients remaining from last report	28
Patients admitted	817
Patients discharged	762
Patients escaped	6
Patients transferred to Manila	2
Patients died	51
Patients remaining December 31, 1914	34
Births in the hospital	13
Persons accompanying patients	17
Surgical dressings	3,993
Major operations performed	115
Minor operations performed	212
Major emergencies admitted	17
Minor emergencies admitted	9
Autopsies held	4

Nationality of patients admitted to hospital.

	Male.	Female.	Total.
Americans	47	18	65
Europeans	13	4	17
Filipinos	488	222	710
Others	22	3	25
Total	570	247	817

Laboratory examinations.

Specimens.	Amer- icans.	Euro- peans.	Filipinos.	Others.	Total.
Fæces	57	12	862	11	942
Urine	77	16	605	11	709
Blood	12	3	431	3	449
Sputum	6	1	70	2	79
Miscellaneous	7	2	17	0	26
Total	159	34	1,985	27	2,205

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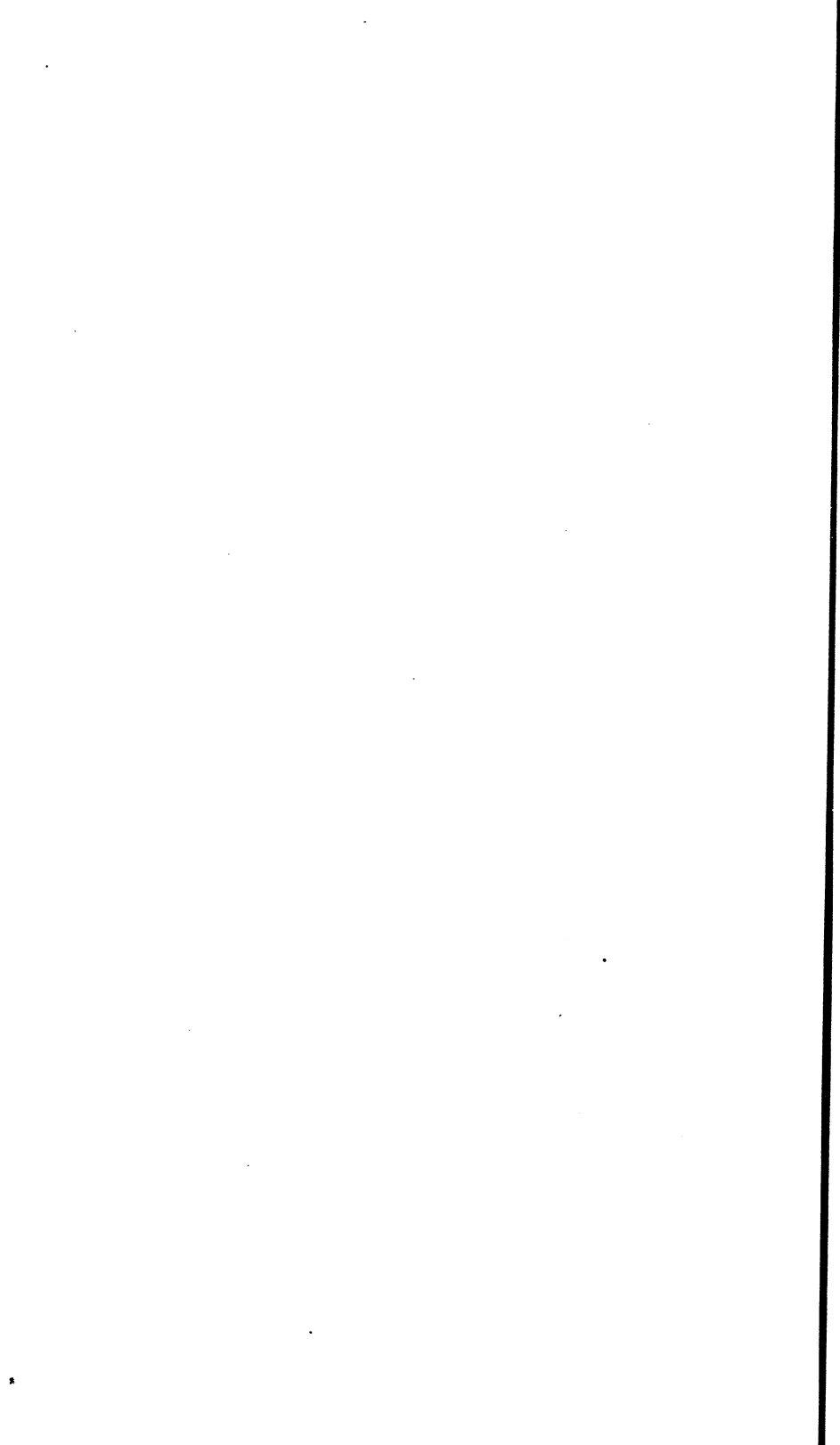
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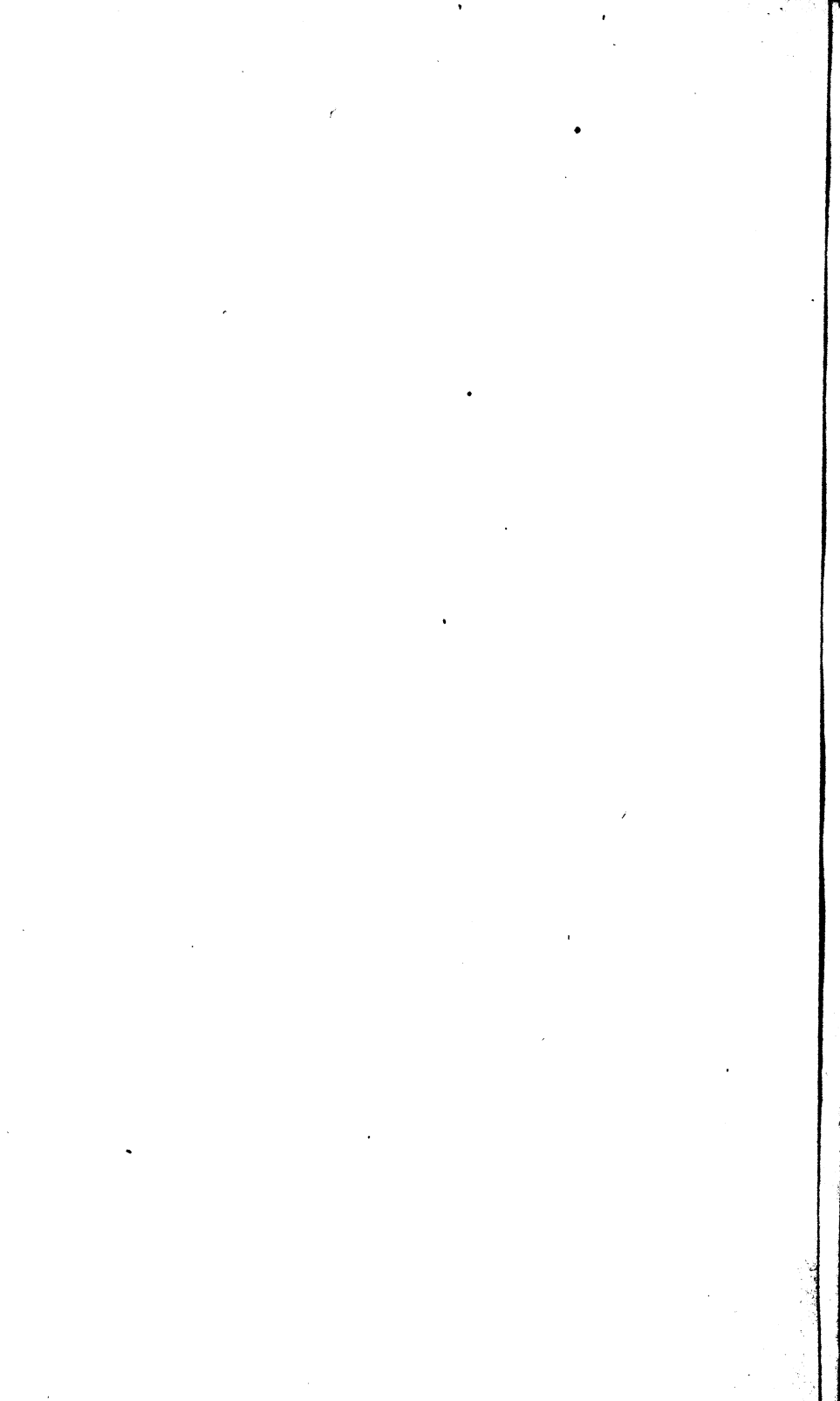
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